Caltrans Metric

04-ALA-580 KP 67.1/67.9 (PM 41.7/42.2)
04-250-284200
2002 STIP
$537,000

SUPPLEMENTAL
NOISE BARRIER SCOPE STUDY REPORT
(NBSSR)

On Route: Eastbound I-580 in City of Oakland, Alameda County
From: KP 67.1 (PM 41.7) West of 14th Avenue
To: KP 67.9 (PM 42.2) at Ardley Avenue

I have reviewed the right of way information contained in this Noise Barrier Scope Summary Report and the R/W Data Sheet attached hereto, and find the data to be complete, current, and accurate:

R.A. MACPHERSON, *DEPUTY DISTRICT DIRECTOR – RIGHT OF WAY*

APPROVAL RECOMMENDED:

JERRY P. MA, *PROJECT MANAGER*

APPROVED:

JUDY CHEN, *DISTRICT DIVISION CHIEF – DESIGN EAST*

2/28/03
DATE

This Supplemental Noise Barrier Scope Summary Report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Amjad Naseer
REGISTERED CIVIL ENGINEER

02/27/03
DATE

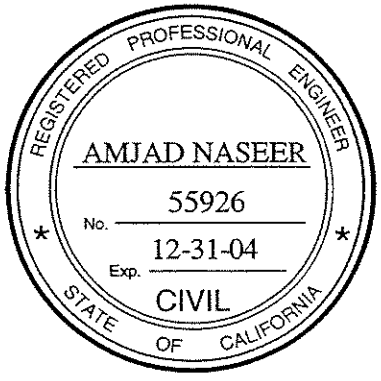


Table of Contents

SUPLEMENTAL
NOISE BARRIER SCOPE STUDY REPORT
(NBSSR)

1. Introduction

The NBSSR for this project was approved June 26, 2001 (see Attachment G). The Traffic Noise Impact Report for this project, completed February 10, 2003 (see Attachment B), maintains the location and the layout for the two soundwalls proposed in the approved NBSSR with only minor changes to the beginning & ending stationing of the soundwalls. Therefore, no changes are needed to the soundwalls proposed in the approved NBSSR. A copy of the Proposed Soundwalls Layout Plan is shown in Attachment C.

Since the NBSSR was approved in June 2001, revisions needed to the approved NBSSR are discussed in the sections described below.

2. Programming & Scheduling

- Programming

This project is currently programmed in the 2002 STIP (see Attachment D) for the fiscal year 2002/03 as follows:

Item	Support Cost
PA&ED	$39,000
PS&E	$73,000
R/W Support	$10,000
Total	$122,000

Additional funds need to be programmed in the STIP for the fiscal year 2004/05 as follows:

Item	Project Cost	Support Cost
R/W	$26,000	
Construction	$511,000	$76,000
Total	$537,000*	$76,000*

* February 2003 Dollars.

- Proposed Project Schedule (see PYPSCAN, Attachment E)

Supplemental NBSSR/PA&ED	February 2003
District PS&E	September 2004
R/W Certification	November 2004
Ready to List	January 2005
Award Contract	July 2005
Complete Construction	July 2006

3. Cost Estimate

The cost estimate in the approved NBSSR of June 26, 2001 needs to be revised to reflect increases due to inflation. Annual escalation rates of 3.4% for construction capital and 2.7% for support costs (see 2002 RTIP, Attachment F) were applied to R/W Capital, Construction Capital, and Construction Support to calculate the current estimate.

Estimate:

Item	Project Cost	Support Cost
PA&ED		$39,000
PS&E		$73,000
R/W	$26,000	$10,000
Construction	$511,000	$76,000
Total	$537,000*	$198,000*

* February 2003 Dollars.

4. Cost Effectiveness

With an estimated project capital cost of $537,000 and 16 residential units to be protected, the cost per unit is $33,563, which is less than the maximum amount of $45,000 in ACCMA's policies. So the proposed soundwall construction remains cost effective.

5. Environmental Clearance

This project satisfies the requirements for Categorical Exemption (CE) under CEQA and Categorical Exclusion (CE) under NEPA. FHWA Determination was obtained on February 27, 2003 (see Environmental Clearance, Attachment A).

6. Project Personnel

The following Design, Alameda-I staff should be contacted if there are any questions regarding this Supplemental NBSSR:

Name	Phone
Jerry Ma, Project Manager District Office Chief	(510) 286-5157
Albert Zepeda Senior Transportation Engineer	(510) 286-5160
Amjad Naseer Project Engineer	(510) 286-5703

7. Attachments

A. Environmental Clearance dated February 27, 2003
B. Traffic Noise Impact Report dated February 10, 2003
C. Proposed Soundwalls Layout Plan
D. 2002 STIP Programming Document
E. PYPSCAN
F. 2002 RTIP – Cost Escalation Rates
G. Noise Barrier Scope Summary Report (NBSSR) dated June 26, 2001

Attachments A

Environmental Clearance

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION/ PROGRAMMATIC CATEGORICAL EXCLUSION DETERMINATION FORM

04-ALA-580	67.1/67.9	284200	
District-County-Route	K.P. (PM)	EA	Project No. (Fed. Prog. Prefix Proj. No., Agr. No.)

PROJECT DESCRIPTION: (Briefly describe project, purpose, location, limits, right-of-way requirements, and activities involved.)

This project proposes to build two soundwalls on I-580 eastbound near 14th Avenue to Ardley Avenue in the City of Oakland, Alameda County. A noise study indicated that current noise levels caused by freeway traffic exceed 67 dBA. The proposed soundwalls, 4.27 m high by 330 m long (14' x 1080') combined will reduce noise levels by 5 dBA for 16 residential units. The proposed noise barrier material is proposed to be masonry blocks (or concrete panels as an alternative). The project will be constructed within the existing State right-of-way and a temporary easement will be required during construction.

CEQA COMPLIANCE

LOCAL ASSISTANCE PROJECTS: Record of CEQA compliance is attached. ☐

STATE PROJECTS:

Categorical Exemption (See 14 CCR 15300 et seq.)

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION *(for State Projects only)*

☐ **Exempt by Statute** (PRC 21080)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt.** Class 1 or ☐ **General Rule exemption** (This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment [CCR 15061(b)(3)].

Dennis Rader for RLG	2/6/03		2/6/03
Signature: Environmental Office Chief	Date	Signature: Project Manager	Date

NEPA COMPLIANCE (23 CFR 771.117)

CATEGORICAL EXCLUSION

- This project does not have a significant impact on the environment as defined by the NEPA.
- This project does not involve substantial controversy on environmental grounds.
- This project does not involve significant impacts on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act.
- In nonattainment or maintenance areas for Federal air quality standards: this project comes from a currently conforming plan and Transportation Improvement Program.
- This project is consistent with all Federal, State, & local laws, requirements or administrative determinations relating to the environmental aspects of this action.

PROGRAMMATIC CATEGORICAL EXCLUSION

☐ Based on the evaluation of this project and supporting documentation in the project files, all the conditions of the September 7, 1990 Programmatic Categorical Exclusion have been met.

CALTRANS NEPA DETERMINATION

Based on an examination of this proposal, supporting information, and the above statements, it is determined that the project is a:

☒ **Categorical Exclusion** ☐ **Programmatic Categorical Exclusion**

Dennis Rader for RLG	2/6/03		2/6/03
Signature: Environmental Office Chief *(for all State & Local CEs)*	Date	Signature: Project Manager/DLA Engineer *(PM: for all State CEs / DLAE: for Local Asst. PCEs)*	Date

FHWA DETERMINATION *(if applicable)*

Based on the evaluation of this project and the statements above, it is determined that the project meets the criteria of and is properly classified as a Categorical Exclusion.

Mahfuz A Ahmed	27 FEB 2003
Signature: FHWA Transportation Engineer	Date

☐ Additional information attached or referenced, as appropriate (e.g. Mitigation commitments **for NEPA only;** Air Quality studies and documentation of exemption from regional conformity or use of CO Protocol; §106 commitments; §4(f) or Programmatic §4(f); date of COE nationwide permit; § 7 species survey results; Wetlands Finding; Floodplain Finding; additional studies; design conditions; Local Agency NOE.)

Attachments B

Traffic Noise Impact Report

State of California
Department of Transportation
District 4 – Oakland

4-Ala-580-KP67.1/67.9 (PM 41.7/42.2)
4-334-284200

Traffic Noise Impact Report

Route I-580

In

City of Oakland, Alameda County

from

14 th Avenue to Ardley Avenue

Recommended For Approval

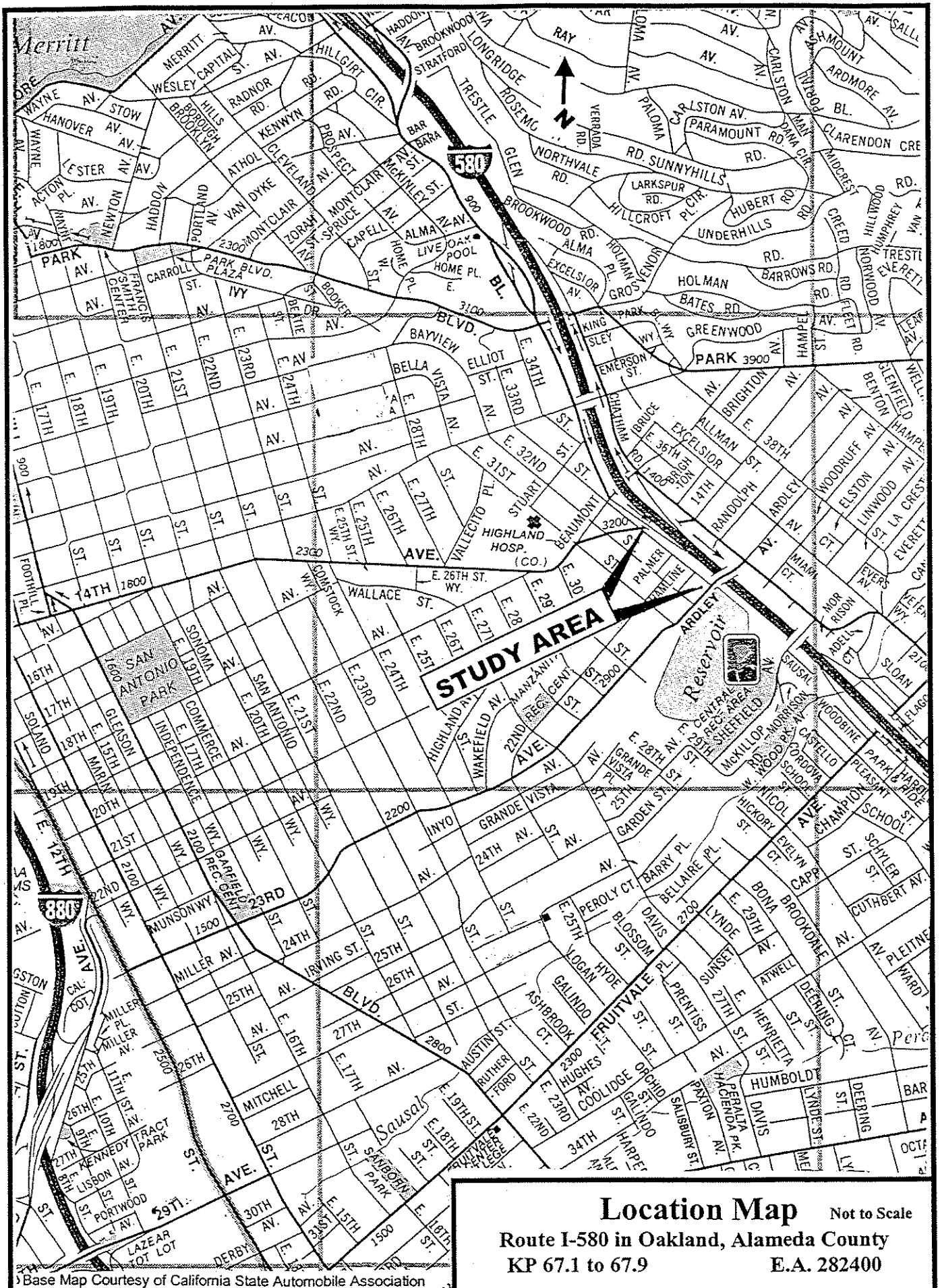
Glenn Kinoshita 2/10/03

Glenn Kinoshita Date
District Branch Chief
Office of Environmental Engineering

Approved By

2/10/03

Ronald M. Moriguchi Date
District Office Chief
Office of Environmental Engineering



Location Map

Not to Scale

Route I-580 in Oakland, Alameda County

KP 67.1 to 67.9 **E.A. 282400**

TABLE OF CONTENTS

I. Summary

Residential units adjacent to the eastbound Route I-580 between 14TH and Ardley Avenues in the City of Oakland, Alameda County, are currently exposed to freeway traffic noise. Without abatement, the noise levels calculated for the receptors in the area ranged from 67 to 74 dBA at the noisiest hour, exceeding the noise abatement criteria established under both Federal Highway Administration and Alameda County Congestion Management Agency (ACCMA) Freeway Soundwall Policy.

The proposed noise abatement measure consists of two sections of soundwalls inside the State right-of-way, which combined would achieve at least 5 dBA reduction in traffic noise for all 16 receptors in the first row.

Soundwall A – 138 m long and varying from 3.0 to 4.3 m in height, along the shoulder of the eastbound Beaumont Avenue on-ramp.

Soundwall B – 177 m long and varying from 3.0m to 4.3 m in height, on State right-of-way line along East 33RD Street.

At an estimated total cost of $507,000, or $31,688 per benefited residential unit, to construct, this project is considered cost effective under the ACCMA's soundwall policy.

This soundwall proposal meets all criteria specified in the ACCMA's soundwall policy. The soundwalls proposed in this report are subject to design considerations such as stopping sight distance, structure integrity and other engineering and environmental issues. The exact location and dimension of the soundwalls will be determined during the project's design phase. The opinions of those affected residents should be sought in reaching the final design of the soundwalls.

II. Noise Impact Technical Report

1 Introduction

Section 215.5 of the California Streets and Highways Code required the development of a system of priorities for ranking the need for installation of noise attenuation barriers along freeways in California, with the highest consideration being given to residential areas which were developed prior to the opening of the freeway. Caltrans previously had a Community Noise Abatement Program (HB311) to prioritize and construct soundwalls along existing freeways and expressways. However, with the passage of Senate Bill 45 (SB45 Koop) in 1997, the responsibility for the delivery of soundwall projects was transferred from Caltrans to various county transportation planning agencies. As the transportation planning agency for Alameda County, Alameda County Congestion

Management Agency (ACCMA) has adopted a county-wide soundwall policy for the planning, design and construction of soundwall projects along freeways.

Residential units adjacent to the eastbound Route I-580 between 14TH and Ardley Avenues in the City of Oakland are currently exposed to freeway traffic noise and is one of the areas listed on the ACCMA soundwall project priority list.

2 Project Description

The area of study is on the west side of Route I-580 between the 14TH and the Ardley Avenues in the City of Oakland, from KP 67.1 to 67.9 (PM 41.7 to 42.2). The area is entirely residential. There are 16 single-family homes in the first row immediately adjacent to the eastbound I-580, including 13 homes on East 33RD Street, 2 on Randolph Avenue and one on Ardley Avenue. They were built between years 1905 and 1927, prior to the opening of Route I-580 in 1963. There is also a three-story apartment building at the corner of 14TH Avenue and East 33RD Street. Route I-580 through this area is an eight-lane freeway, four in each direction. Large trucks over 4 ½ tons are prohibited on this stretch of Route I-580 since its opening day. The Location Map shows the vicinity of the study area.

3 Noise Abatement Criteria

The noise abatement criteria (NAC) were established by the Federal Highway Administration (FHWA) regulations in Title 23, Code of Federal Regulations, Part 772 (23 CFR 772) covering Type II projects, a project type classified by FHWA on existing freeways with development predating the freeway. According to the soundwall policy adopted by ACCMA, which this noise study follows, the County's soundwall program applies to:

- Residences developed prior to opening of the freeway.
- Residences affected by an existing or predicted future exterior traffic noise at or exceed 65 dBA, Leq(h). FHWA established the noise abatement criterion for the exterior of residences at noise level approaching 67 dBA. The term "approaching" is defined by ACCMA as within 2 dBA.
- Where noise can be mitigated by at least 5 dBA with a soundwall.
- Where the cost per dwelling units does not exceed $45,000. The not-to-exceed amount may be adjusted periodically to reflect current construction costs.

4 Methodology

Noise measurements were taken in April 2000 to determine the existing noise levels at selected locations. Two Metrosonics, Inc. sound level meters Model db-3100 Metrologgers were used to measure sound levels at four locations along 33RD Street, each 15-minute in duration. Traffic volumes were counted manually in concurrence with the measurements.

The results were used to compute the highest hourly traffic noise levels, which usually occurs when the freeway traffic condition is at Level of Service D (LOS "D"). Presently, traffic on Route I-580 operates at LOS "D" during congested hours of the day. The calculated levels, therefore, represent the highest noise levels in existence now. No further increase in noise is anticipated in the future, providing the freeway configuration remains unchanged.

Computer modeling were done with the FHWA approved Traffic Noise Model (TNM) Version 1.1, which considered factors such as traffic volumes, vehicle types, speeds, terrain, shielding, roadway configuration and grade for deriving the highest noise levels at the measurement and the receptors locations.

Most homes on East 33RD Street have terraced front yards and their primary living areas situated considerably higher than the local street in front. Computation of noise considered the raised level of the porch/living area as the receptor's elevation. The three-story apartment building at the corner of 14TH Avenue and East 33RD Street was not considered a noise sensitive receptor for this study, since it has no outdoor activity areas with frequent human use.

TNM was also used in evaluating the effectiveness of soundwall proposals. Soundwalls were designed to reduce the noise levels by a minimum of 5 dBA for the intended receptors.

Table 1 shows the highest noise levels calculated by TNM, with and without the soundwalls, for all the receptors in the project area.

TABLE 1 - Noise Levels

Receptor No.	Highest Noise Levels (Calculated)		Reduction	Location
	No Wall	With Walls		
	dBA, Leq(h)	dBA, Leq(h)	dBA	
R1	67	62	5	E. 33rd St.
R2	68	62	6	E. 33rd St.
R3	69	62	7	E. 33rd St.
R4	69	62	7	E. 33rd St.
R5	70	64	6	E. 33rd St.
R6	71	65	6	E. 33rd St.
R7	71	66	5	E. 33rd St.
R8	72	67	5	E. 33rd St.
R9	73	68	5	E. 33rd St.
R10	73	67	6	E. 33rd St.
R11	73	66	7	E. 33rd St.
R12	73	66	7	E. 33rd St.
R13	73	66	7	E. 33rd St.
R14	70	62	8	Randolph Ave.
R15	74	60	14	Randolph Ave.
R16	74	61	13	Ardley Ave.

5 Recommendations

The noise levels for the area's receptors ranged from 67 to 74 dBA without soundwalls at the noisiest hour, which are above the noise abatement criteria of both FHWA and ACCMA's soundwall policy. The proposed noise abatement measure consists of two sections of soundwalls inside the State right-of-way, which combined would achieve at least 5 dBA reduction in traffic noise for all receptors. EXHIBIT 1 shows the location of the proposed soundwalls in relation to the freeway and the receptors.

Soundwall A (from "F" Line Stations 218+40 to 222+90) – 138 m in length and varying from 3.0 m to 4.3 m in height, along the shoulder of the eastbound Beaumont Avenue on-ramp. It includes of a 35 m and 3.0 m high segment on top of the existing eastbound on-ramp undercrossing structure at 14TH Avenue and a continuous segment, 103 m long and 4.3 m high, on the edge of shoulder of the on-ramp. Heights are measured from the grade of existing surface.

Soundwall B (from "F" Line Stations 221+40 to 227+20) – 177 m in length and varying from 3.0 m to 4.3 m in height, on State right-of-way line along E. 33RD Street. It consists of an 83 m long and 4.3 m high segment at the north end and a 94 m long and 3.0 m high segment continues to the south. Heights are measured from the grade of existing surface.

According to Caltrans Highway Design Manual, 4.3 m is considered the maximum height of soundwall when situated within 4.5 m from the edge of the traveled way. Caltrans usually requires a soundwall be designed to block the line of sight from the receptor to the exhaust stack of a truck, which these proposed soundwalls would not be able to achieve due to drastic terrain condition. However, noise emitted from truck stacks would not present as much of a nuisance in this area, since heavy trucks are prohibited on Route I-580 except in emergency situations.

Based on the cost estimated in the Noise Barrier Scope Summary Report prepared in June 2001 at an earlier stage of this project, these two soundwalls would cost $507,000 to construct. With a total of 16 benefited residential units, the cost per unit would be $31,688, which is below the maximum amount of $45,000 per unit established in the ACCMA's freeway soundwall policy. This project is, therefore, considered cost effective under the policy.

It is determined this soundwall proposal meets all criteria specified in the ACCMA's freeway soundwall policy. Soundwalls proposed in this report are subject to design considerations such as stopping sight distance, structure integrity and other engineering and environmental issues. The exact location and dimension of the soundwalls will be determined during the project's design phase. Transition of wall height from 3.0m to 4.3m should be made less abrupt with incremental steps. The opinions of those affected residents should be sought in reaching the final design of the soundwalls.

6 Construction Noise

Noise generated while constructing the soundwalls could at times reach levels higher then the existing traffic noise. The impact from construction activities would be temporary and can be minimized by the following measures:

- Avoid construction activities during nighttime and weekends, when possible.
- Keep the community informed of any upcoming especially noisy construction activities.
- Implement Section 7-1.01Ĭ, "Sound Control Requirements" of the Caltrans Standard Specifications.

7 Glossary

dBA – The sound pressure level in decibels measured with a sound level meter having a frequency-weighted network corresponding to the A-Scale used as a standard by the American National Standards Institute (ANSI). The A-weighted scale of measurement, which correlates with human hearing response, tends to suppress lower frequency sounds below 1000 Hertz (Hz) and higher frequency above 4000 Hz.

Leq(h) – Hourly Equivalent Sound Level. Leq, a descriptor of sound, is the equivalent steady state sound level which in a stated period of time contains the same acoustic energy as the real fluctuating sound levels during the same period. The period is usually one hour and the equivalent sound level is expressed as Leq(h).

Line of Sight – A straight line between the observe location and a specific noise source.

Noise – Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Receptor – A location for noise measurement or where noise sensitive receiver likely to present.

Sound Level Meter – An instrument used for measuring sound levels in a specified manner. It comprises a microphone, an amplifier, an output display, and frequency weighting networks.

8 Reference

Procedures for Abatement of Highway Traffic Noise and Construction Noise, Tile 23, Code of Federal Regulations, Part 772, 1982

Alameda County Congestion Management Agency Freeway Soundwall Policy (Proposed), 2002

Traffic Noise Analysis Protocol, Caltrans, Environmental Program, Environmental Engineering October 1998

Technical Noise Supplement, Caltrans, Environmental Program, Environmental Engineering, October 1998

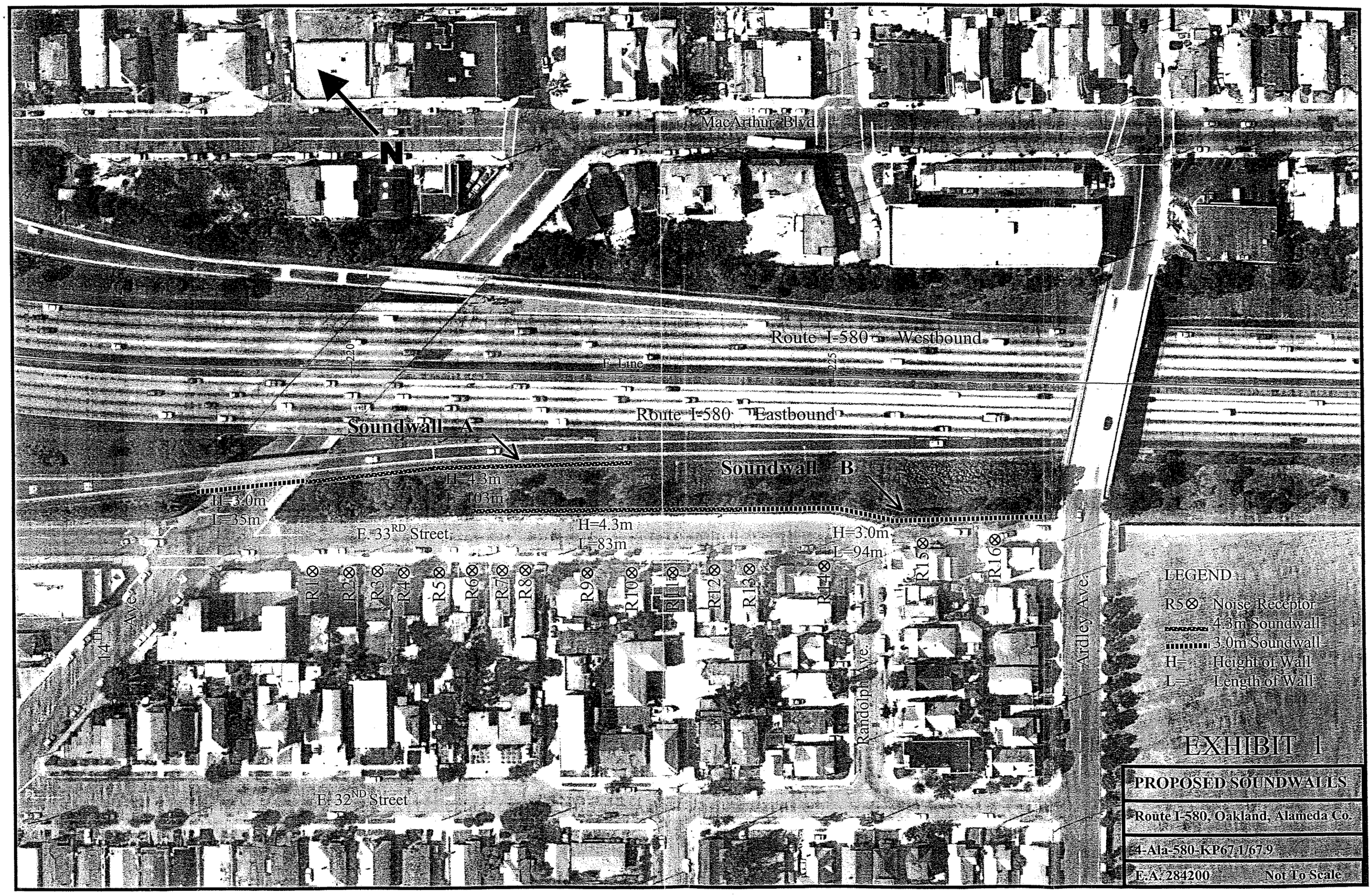
FHWA Traffic Noise Model, TNM Version 1.1, September 2000

Highway Design Manual, Chapter 1100, Highway Traffic Noise Abatement, Caltrans, November 2001

2000 Annual Average Daily Truck Traffic on the California State Highway System, Division of Traffic Operations, Caltrans, 2002

9 Exhibits

Exhibit 1 – Proposed Soundwalls
Exhibit 2 – Common Indoor and Outdoor Noise Levels
Exhibit 3 – Noise Abatement Criteria


N
MacArthur Blvd.
Route I-580 Westbound
I-580
E. Line
Route I-580 Eastbound
Soundwall A
H=4.3m
L=103m
H=3.0m
L=35m
Soundwall B
H=4.3m
L=83m
H=3.0m
L=94m
E. 33RD Street
E. 32ND Street
14th Ave.
Randolph Ave.
Ardley Ave.
R1⊗
R2⊗
R3⊗
R4⊗
R5⊗
R6⊗
R7⊗
R8⊗
R9⊗
R10⊗
R11⊗
R12⊗
R13⊗
R14⊗
R15⊗
R16⊗
LEGEND
R5⊗ Noise Receptor
4.3m Soundwall
3.0m Soundwall
H= Height of Wall
L= Length of Wall
EXHIBIT 1
PROPOSED SOUNDWALLS
Route I-580, Oakland, Alameda Co.
4-Ala-580-KP67.1/67.9
E.A. 284200
Not To Scale

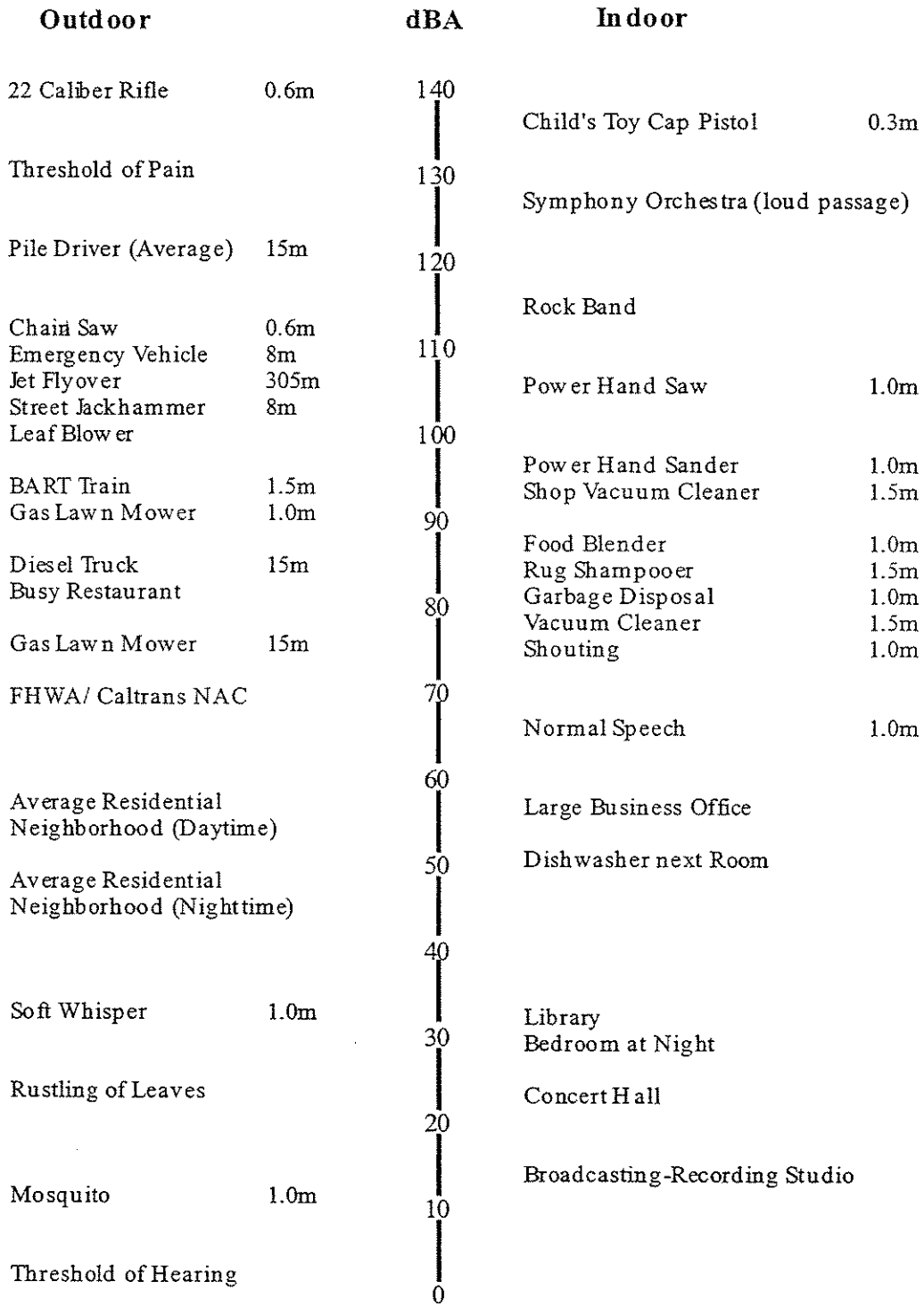


Exhibit 2 - Common Indoor and Outdoor Noise Levels

Activity Category	Hourly A-Weighted Sound Level dBA, Leq(h)	Description of Activity Categories
A	57 Exterior	Lands of which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 Interior	Residences, motels, hotels,public meeting, rooms, schools, churches, libraries, hospitals, and auditoriums.

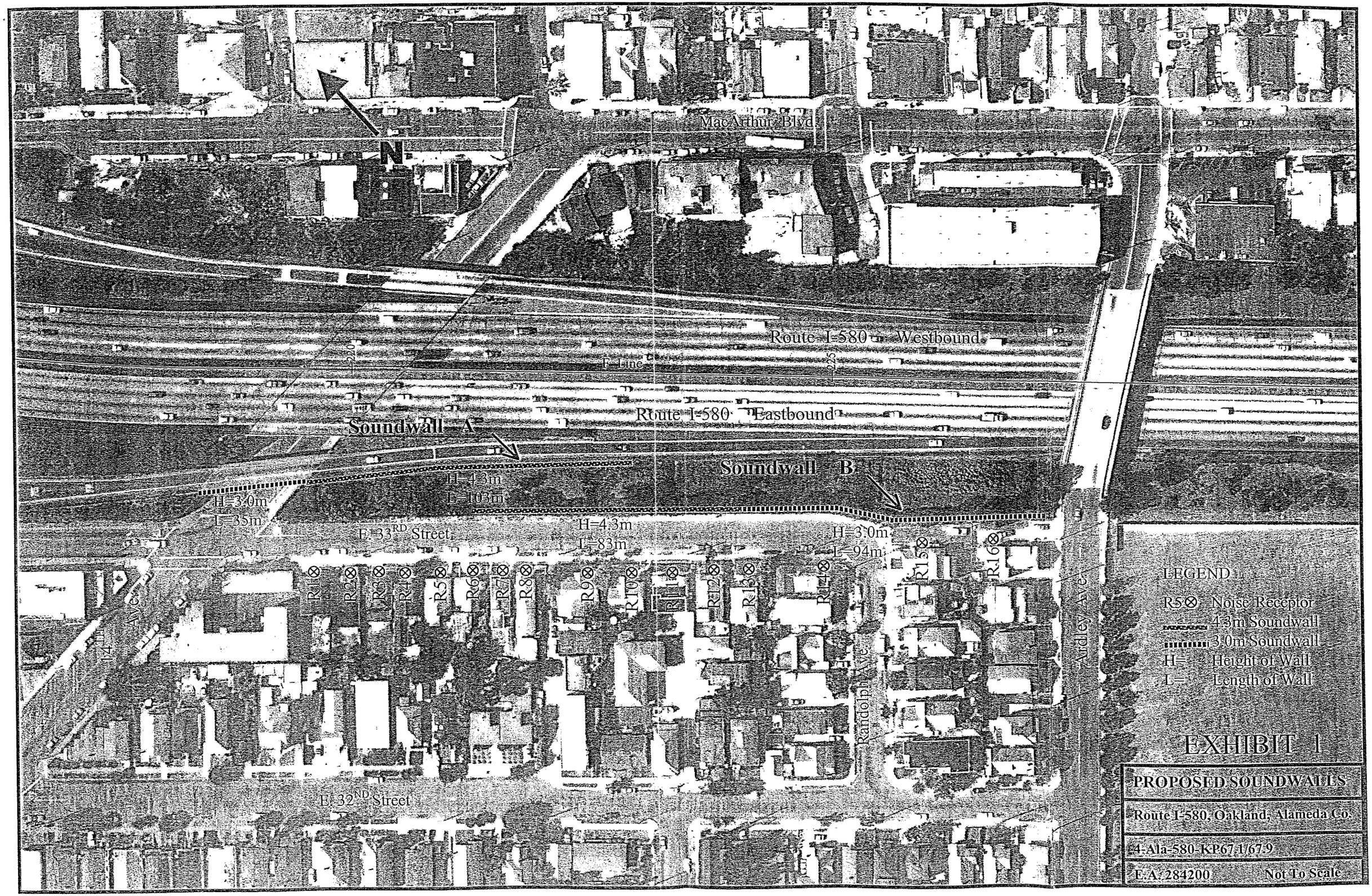
Chapter 30, Section 2 - New Highway Construction or Reconstruction
7th Edition, Project Development Procedures Manual January 1, 1997

Exhibit 3 - Noise Abatement Criteria (NAC)

Attachments C

Proposed Soundwalls Layout Plan

Attachment G. Right of Way Data Sheet


MacArthur Blvd
N
Route I-580 Westbound
I-580
Route I-580 Eastbound
Soundwall A
H=4.3m
L=103m
H=3.0m
L=35m
Soundwall B
H=4.3m
L=83m
H=3.0m
L=94m
E. 33RD Street
E. 32ND Street
14th Ave
Ardley Ave
Randolph Ave
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
LEGEND
R5⊗ Noise Receptor
4.3m Soundwall
3.0m Soundwall
H= Height of Wall
L= Length of Wall
EXHIBIT 1
PROPOSED SOUNDWALLS
Route I-580, Oakland, Alameda Co.
4-Ala-580-KP67.1/67.9
E.A. 284200
Not To Scale

Attachments D

2002 STIP Programming Document

State Transportation Improvement Program

Alameda County

Document Year 2002, PPNO 0148A, Version Number 2

(Dollars in Thousands)

DIST: 04	COUNTY: Alameda County	TITLE (DESCRIPTION):	LEAD AGENCY: Caltrans
RTE: 580	PM: 42.2 / 41.7	I-580 Eastbound Oakland 14th/Ardley Nois (Oakland; Along Eastbound I-580 from west of 14th Avenue to Ardley Avenue; Construct noise barrier)	MPO: Metropolitan Transportation Commission
PPNO: 0148A	KP: 67.9 / 67.1		CORRIDOR: LAW: 02
EA: 284201	MPO ID: 6		PRJ MGR:
CTIPS ID: 206-0000-2171			PHONE:
ELEMENTS: Capital Outlay			CALNET:

ASSEMBLY: 16
SENATE: 9
CONGRESS: 9

PROJECT VERSION HISTORY *(Printed Version is Shaded)* (Displays 9 of the most recent versions)

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Programmed Dollars in Thousands - Total For Project: Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
2	Active	06/12/02	DNOEL	None				483	24	39	73	10	73
1	Official	04/04/02	KBALAJI	Adoption - New Project	G-02-04			483	24	39	73	10	73

Fund Source 1 of 2 — **Future (Unfunded Need)**

Fund Type: Future Funds
Program Code: FUTURE
Unfunded Need to Complete
Funding Agency: Alameda County Congestion Management Agency

VOTE	DATE	AMOUNT

	PRIOR	02/03	03/04	04/05	05/06	06/07	07/08	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP				73					73
R/W				24					24
CON				483					483
Total:				589					580

Fund Source 2 of 2 — **STIP - RIP**

Fund Type: National Hwy System
Program Code: 20.XX.075.600
Regional Improvement Program
Funding Agency: Alameda County Congestion Management Agency

VOTE	DATE	AMOUNT

	PRIOR	02/03	03/04	04/05	05/06	06/07	07/08	FUTURE	TOTAL
PA&ED		39							39
PS&E		73							73
R/W SUP		10							10
CON SUP									
R/W									
CON									
Total:		122							122

Project Total:

VOTE	TOTAL AMOUNT
PA & ED	
PS & E	
RW	
CON	

	PRIOR	02/03	03/04	04/05	05/06	06/07	07/08	FUTURE	TOTAL
PA&ED		39							39
PS&E		73							73
R/W SUP		10							10
CON SUP				73					73
R/W				24					24
CON				483					483
Total:		122		580					702

HQ Comments:
******** Version 2 - 06/12/2002 ********

06/12/02 - Added EA, per district's request. dn
05/03/02 Information per 2002 STIP adopted by the CTC under resolution G-02-04 dated April 04, 2002
******** Version 1 - 05/02/02 ********
4/29/02 Updated project element, year added, TRAMS code and RIP fund type. -lgreen

Attachments E

PYPSCAN

```
PYRS 04 284200          M ALA 580   R41.7        D    P=F11 N=F12  *  A C S P  *
S U P P O R T  BY  F I SC A L  Y E A R  WINDOW YR __ LAST PYPSCAN 09/20/02 (P)
   MONTHS  02-03  03-04  04-05  05-06  06-07  07-08  08-09  09-10  10-11  AFTER
PJD    58    .08    .22    .05
RWO          .05    .22    .09    .03
STD
STC
CON    17                  .03   1.42    .04

TOTAL        .13    .44    .17   1.45    .04
M I L E S T O N E S  (* COMPUTED BY PYPSCAN) REG RW LEAD  14 WDYS   80 FLAG S X
   ID NEED  APPR PSR BEG ENVR BEG PR   CIRC DPR CIRC ED  HEARING  PAR RPT
   06/01/00 06/26/01
 * 06/00    06/01    NA/       NA/       NA/       NA/       NA/       NA/
   PA&ED CL GEO BASE BR SITE   BEG BR    RW MAPS   REG RW    SKEL LAY ENV REVL
   02/  /03 06/  /03                     08/  /03
 * 02/03    06/03    NA/       NA/       08/03     08/03     08/03     NA/
   BR PS&E  DT PS&E  RW CERT   RDY LIST  HQ ADV    APR CNTR  JOB COMP
            09/  /04 11/  /04 01/  /05  04/  /05  07/  /05  07/  /06
 * NA/      09/04    11/04    01/05     04/05     07/05     07/06

                                                              FREEZE   THAW
                                                               FFF
PYPSCAN PROJECT COMPLETE                                  02/21/03 09:09:41
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STIP 04 284200 M ALA 580 R41.7 D P=F11 N=F12 * STIP HISTORY

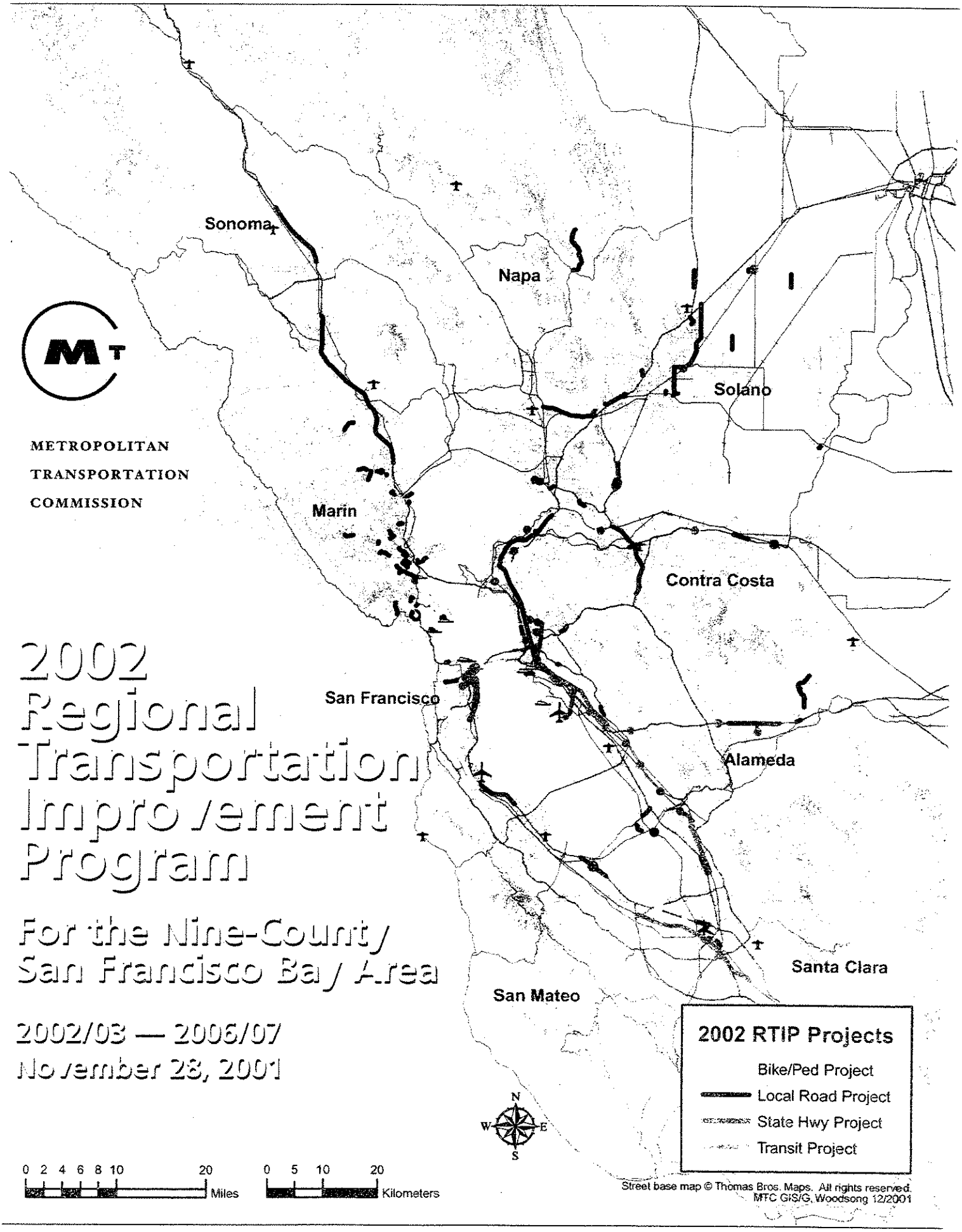
	STIP YR	EX	STIP NO	CONSTR YR	CONSTR AMT	TEC	RIGHT OF WAY YR	RIGHT OF WAY AMT	RIGHT OF WAY YR	RIGHT OF WAY AMT	AFTER	PROGM	FUND
1	02S	_	0148A	__	0	0	__	0	__	0	0	HB311	IM
2	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____
3	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____
4	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____
5	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____
6	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____
7	___	_	_____	__	_____	_____	__	_____	__	_____	_____	_____	____

1 ___ _____
2 ___ _____
3 ___ _____

THIS SCREEN IS READ ONLY WHEN PROJECT IS FROZEN

Attachments F

2002 RTIP – Cost Escalation Rates



METROPOLITAN
TRANSPORTATION
COMMISSION

2002 Regional Transportation Improvement Program

For the Nine-County San Francisco Bay Area

2002/03 — 2006/07
November 28, 2001

2002 Regional Transportation Improvement Program
Policies and Procedures
Attachment D: 2002 RTIP Project Screening Criteria

Eligible Projects

A. **Eligible Projects.** SB 45 (Chapter 622, Statutes 1997) widened the range of projects that are eligible for consideration in the RTIP. Eligible projects include, state highway improvements, local road improvements and rehabilitation, public transit, intercity rail, pedestrian, and bicycle facilities, and grade separation, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety.

Planning Prerequisites

B. **RTP Consistency.** Projects included in the RTIP must be consistent with the adopted Regional Transportation Plan (RTP), which state law requires to be consistent with federal planning and programming requirements. Each project to be included in the RTIP must identify its relationship with meeting the goals and objectives of the RTP, and where applicable, the RTP ID number and/or RTP travel corridor and whether the project is to be credited against the county's transit capital shortfall target.

C. **CMP Consistency.** Local projects must also be included in a County Congestion Management Plan (CMP), or in an adopted Capital Improvement Program (CIP) for counties that have opted out of the CMP requirement, prior to inclusion in the RTIP.

D. **PSR or PSR Equivalent is Required.** Projects in the STIP must have a complete project study report or, for a project that is not on a state highway, a project study report equivalent or major investment study. The intent of this requirement is to ensure that the project scope, cost and schedule have been adequately defined and justified. This requirement is particularly important in light of SB 45 timely use of funds requirements, discussed below.

   The required format of a PSR or PSR equivalent varies by project type. Additional guidance on how to prepare these documents is available on the internet at the addresses indicated within Part 3 (Project Study Report (PSR), or equivalent) of Attachment E: 2002 RTIP Project Application, which includes a table categorizing PSR and PSR equivalent requirements by project type.

Project Costs and Phases

E. **Escalated Costs.** All projects will count against share balances on the basis of their fully escalated (inflated) costs. All RTIP project costs must be escalated to the year in which project delivery is proposed.

   As required by law, inflation estimates for Caltrans operations (support) costs are based on the annual escalation rate established by the Department of Finance. For the 2002 STIP the escalation rate for Caltrans operations is 2.7 percent. The annual inflation factor for Caltrans

capital projects is based on the California Highway Construction Cost Index. For the 2002 STIP period the escalation rate for Caltrans capital construction is 3.4 percent.

Local project sponsors may use the state escalation rates or their own rates in determining the escalated project cost in the year programmed.

F. Project Phases. Projects should be separated into the following project components:

1. Completion of all permits and environmental studies
2. Preparation of all Plans, Specifications, and Estimates
3. Acquisition of right-of-way
4. Construction and construction management and engineering, including surveys and inspections."

Note: Right-of-way and construction components on Caltrans projects must be further separated into capital costs and Caltrans support costs.

The project sponsor/CMA must display the project in these four components (six for Caltrans projects) in the final submittal. STIP funding amounts programmed for any component shall be rounded to the nearest $1,000.

G. Fiscal Years of Programming. The 2002 STIP covers the five-year period from FY 2002-03 though 2006-07. Therefore, no new projects will be programmed in FY 2001-02. This includes the programming of any unprogrammed balances from the 2000 STIP. Project sponsors wishing to access funds in FY 2001-02 must program the funds in FY 2002-03, and request an advance of funds into the 2001-02 fiscal year. For delivery purposes, STIP funds will not be amended into the current year of the STIP, unless there is strong justification.

Readiness Standards

H. Project Phases Must Be Ready in the Year Proposed. Funds designated for each project component will only be available for allocation until the end of the fiscal year in which the funds are programmed in the STIP. Once allocated, the sponsor will have two additional years to expend funds. For construction, the sponsor will have one year to award a contract and three years to expend funds. It is therefore very important that projects be ready to proceed in the year programmed.

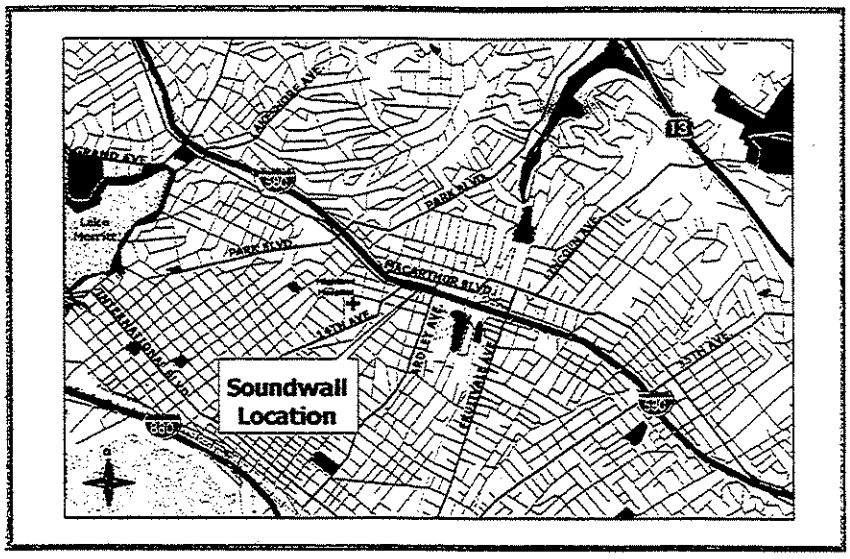
I. Completion of Environmental Process. Government Code Section 14529(c) requires that funding for right-of-way acquisition and construction for a project may be included in the STIP only if the CTC makes a finding that the sponsoring agency will complete the environmental process and can proceed with right-of-way acquisition or construction within the five year STIP period. Furthermore, in compliance with Section 21150 of the Public Resources Code, the CTC may not allocate funds to local agencies for design, right-of-way, or construction prior to documentation of environmental clearance under the California Environmental Quality Act (CEQA). Therefore, project sponsors must demonstrate to MTC that these requirements can be reasonably expected to be met prior to programming right-of-way or construction funds in the RTIP.

Attachments G

Noise Barrier Scope Summary Report (NBSSR)

04 - ALA – 580 KP 67.1/67.9 (PM 41.7/42.2)
04-218-28420K
2000 STIP
$507,000

NOISE BARRIER SCOPE SUMMARY REPORT



On Route: Eastbound I-580 in City of Oakland, Alameda County

From: KP 67.1 (PM 41.7) West of 14th Avenue

To: KP 67.9 (PM 42.2) at Ardley Avenue

I have reviewed the right of way information contained in this Noise Barrier Scope Summary Report and the R/W Data Sheet attached hereto, and find the data to be complete, current, and accurate:

R. A. MACPHERSON, *DISTRICT DIVISION CHIEF - RIGHT OF WAY*

APPROVAL RECOMMENDED:

ROBERT A. ANDERSON, *PROJECT MANAGER*

APPROVED:

BIJAN SARTIPI, *DISTRICT DIVISION CHIEF-DESIGN EAST*

6/26/01

DATE

This Noise Barrier Scope Summary Report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Wellington B. Lee 3-28-2001

WELLINGTON B. LEE, *REGISTERED CIVIL ENGINEER* *DATE*

PROJECT SUMMARY

Based on the request of the Alameda County Congestion Management Agency (ACCMA), this Noise Barrier Scope Summary Report (NBSSR) proposed a soundwall to be constructed on south side of eastbound route 580 near 14th Avenue to Ardley Avenue in the City of Oakland. The total cost is $507,000 (excluding Caltrans engineering support) with protection of 16 residential units. The unit cost is $31,688, which is less than $45,000 of ACCMA's maximum amount per unit. The noise levels of 16 residential units exceed 67 dBA caused by freeway traffic. A new soundwall can reduce noise level by a minimum of 5 dBA. The alternative solution for the project is no build.

TABLE CONTENT

9. ATTACHMENTS 19

Attachment A. Location Map

Attachment B. Noise Barrier Strip Map (Layouts)

Attachment C. Preliminary Project Cost Estimate Summary

Attachment D. Aerial Photo of Proposed Soundwalls between 14th Avenue and Ardley Avenue in the City of Oakland, Alameda County, CA (1-22-98, 1:2400, 04-ALA-580, 22-101, CALTRANS ASC.9841, LOC.04-2, FL 610 mm)

Attachment E. Typical Sections:

- E-1. Typical Section of Soundwall A at F-Line Station 219+00 English (Based on As-Built-Plans, Structure & Construction Recommendations)
- E-2. Typical Section of Soundwalls A and B at Overlap Section (close to F-Line Station 221+75 English)
- E-3. Typical Section of Soundwall B (close to F-Line Station 224+00 English)
- E-4. Typical Section of Soundwall B with Construction Easement (close to F-Line Station 226+50 English)

Attachment F. As-Built-Plans:

- F-1. Pavement Elevations & Grading Contours with Soundwall Layouts
- F-2. Construction Details
- F-3. Drainage and Sanitary Sewers
- F-4. Highway Lighting

Attachment G. Right of Way Data Sheet

Attachment H. Preliminary Geotechnical Report

Attachment I. Preliminary Structure Design Report

Attachment J. Preliminary Environmental Review

Attachment K. PYPSCAN and XPM

Attachment L. NBSSR PERFORMANCE MEASURES

NOISE BARRIER SCOPE SUMMARY REPORT

1. INTRODUCTION

A. Proposal and Limits

It is proposed to construct a soundwall on Route 580 eastbound from KP 67.1 to 67.9 (PM 41.7 to 42.2) near 14th Avenue to Ardley Avenue in the City of Oakland in Alameda County. The location map, layout and aerial photo are shown on Attachments A, B, and D.

The alternative solution for the project is no build.

B. Deficiencies & Justification

The 1998 State Transportation Improvement Program (STIP) Augmentation identified $5.0 million in reserves for soundwall construction in Alameda County for 2000 STIP. The Alameda County Congestion Management Agency (ACCMA) requested the California Department of Transportations (Caltrans) for this summary report, and it is consistent with its overall transportation priorities and objectives.

C. Project Category

This project is anticipated to be a Category 5 project because of its minimal economic, social and environmental impacts.

2. BACKGROUND

A. Funding Source: ACCMA

(1) Is project in STIP? Yes

This project is a candidate of 2000 STIP programs prior to the 2002 STIP. Federal funds have contribution in the STIP funding source. Amendment and approval is required for this project to be programmed in 2000 STIP. It is suggested that ACCMA send a formal request to Caltrans through Metropolitan Transportation Committee (MTC) for the amendment and approval as soon as this NBSSR is approved.

(2) Is project being advanced by local agency with costs to be paid back by State ? NO

The MTC's *Final 1998 Regional Transportation Plan* (RTP), amended May 1999 earmarked $5.0 million for soundwall construction in Alameda County under reference number 98208.

B. Public Involvement

(1) Community support and/or opposition:

Caltrans and the ACCMA have received residential complaints concerning excessive freeway traffic noise at this location. See Attachment A. Presently there is no opposition to the proposed soundwall project.

(2) Proposed community contact about the proposed noise barrier and aesthetics: Public involvement will be initiated during the design phase to obtain public input.

(3) Commitments to Local Agencies:

With passage of Senate Bill 45, Caltrans Community Noise Abatement Program / HB311 Program was eliminated along with the application of the State noise policy for this soundwall project. Responsibilities for soundwall construction and justification were transferred from Caltrans to the Congestion Management Agencies.

Caltrans is committed to complete a Noise Barrier Scope Study Report (NBSSR) so that the ACCMA can determine if soundwall construction at this location is feasible. Meetings with the ACCMA were conducted.

C. Project Priority

(1) On Statewide Priority List? NO

(2) Priority Index (PIN)? NA

3. DESIGN INFORMATION

A. Existing Facility

(1) Route 580 between 14th Avenue and Ardley Avenue in the City of Oakland is an eight-lane freeway that consists of four 3.7-m lanes in each direction, 2.4-m inside shoulder, 3.0-m outside shoulder. This location has not experienced major reconstruction since its original construction.

The proposed project has two sections of Soundwalls: A and B (See Attachments B and D). The first section, Soundwall A, will be constructed on the eastbound 14th Ave. U.C. On-Ramp/Bridge (#33-309-OL) with F Line Stations from 218+00 to 222+25 in English unit (Attachment B). Typical cross sections are in Attachment E. The two soundwalls will be constructed on different elevations (Attachment F-1). There is a 46-m overlap between the two soundwalls. The offset distance between the two soundwalls at the overlap varies between 15 - 18 m (50' – 60'). This overlap meets with the overlap requirement in Caltrans DHM Chapter 1100 for a minimum of 2.5 to 3 times the offset distance in order to

maintain the integrity of the sound attenuation.

(2) Right of Way and Fencing

The second section is Soundwall B which is to be constructed inside the existing State's Right of Way (R/W) and replaces the existing Chain Link Fence (Attachment B). The Chain Link Fence will be removed during the construction. The Soundwall B is at F Line Stations from 220+75 to 227+30 in English unit. The dimensions of Soundwall B are 4.27 m high and 200 m long.

Construction easement is required for partial construction of Soundwall B (Attachment B). The easement area is about 167 m^2 [3.0 m (in width) x 55 m (in length)], parallel to the State's Right of Way and Chain Link Fence.

Based on the estimate from Caltrans Right of Way, Right of Way lead time will require a minimum of 14 months and shall start no later than November 2001 (see PYPSCAN in Attachment K-1).

B. Traffic Data

(1) Current Year: 1999

ADT 186,000 % Trucks 0.9 Peak Hour 14,600 Peak Month 191,000

(2) Design Year: 2020

ADT 254,273 (Assume Annual Increase 1.5%) DHV 19,070 (7.5% of ADT)

C. Field Review

(1) District Personnel (Name/Branch): Date: 03/06/2000

Chuan Chen, Advance Planning

Shiang Yang, Environmental Engineering (Noise Study)

(2) District Program Advisor Field Review? Yes Date: 02/25/2000

(3) Others: Wellington B. Lee, Advance Planning Date: 10/16/2000

D. Noise Study

(1) Noise Study Completed? Yes Date: 05/12/2000

(2) Noise Report Prepared? No Date:

For effective noise reduction from freeway traffic, it is recommended to construct a soundwall in two parts due to geographical elevation difference (Attachment D):

(a) Soundwall A: - Construction on the shoulder eastbound I-580.

- F-Line Station from 218+00 to 222+25 (English Unit).
- Dimension 0.2 m x 4.27 m x 130 m (thickness x height X length).

(b) Soundwall B: - Construction on R/W Line.

- F-Line Station from 220+75 to 227+30 English.
- Dimension 0.2 m x 4.27 m x 200 m (thickness x height X length).

Note: There is about 46-m overlap between Soundwalls A and B (Attachment E-2).

4. PROPOSAL

A. Description

Based on a noise analysis by the Caltrans Office of Environmental Engineering, two soundwalls are proposed to be constructed on Route I-580 eastbound near 14th Avenue to Ardley Avenue from KP 67.1 to 67.9 (PM 41.7 to 42.2) in the City of Oakland, Alameda County. The noise study results indicate that current noise levels caused by freeway traffic exceed 67 dBA (HB311 criteria). The proposed soundwalls, 4.27 m high and 330 m long (14' x 1080'), will reduce noise levels by a minimum of 5 dBA for 16 residential units. The soundwall material is proposed to be masonry blocks (or concrete panels as alternative).

B. Value Analysis (VA) Study

Article 2 of Caltrans Project Development Procedures Manual (7th Edition, July 1, 1999) states: "The District Annual VA Program should consider any State transportation projects developed by Caltrans, local agencies, consultants, or private developers that are estimated to exceed one million dollars." The estimated cost of this project is $507,000 , which is under one million dollars. Therefore, a VA study for this project is not required.

C. Acceptable Noise Barrier Materials for Proposed Project:

(1) Masonry Block

(2) Concrete Panel

D. Noise Study Recommendations

Wall No. (Part)	Limits *	Length (m)	Ht.** (m)	Direction(nb,sb,eb ,wb) and Location (r/w line, shoulder or elsewhere)	Comments
A	F-Line Station: 218+00 to 222+25	130	4.27	I-580 Eastbound, Shoulder	Construction on Bridge structure plus piles.
B	F-Line Station: 220+75 to 227+30	200	4.27	I-580 R/W Eastbound, Chain Link Fence	On 0.41 m diameter piles, 4.27 m depth, and 4.88 m spacing.

* Existing facility (Stationing in English Unit)
** Height as defined in HDM Section 1102.7(3)

E. Noise Barrier Foundation

(1) Geotechnical Analysis

A Preliminary Geotechnical Report (Attachment H) recommended that the proposed soundwall foundation need piles as:

Soundwall No.	Wall Height (m)	Pile Spacing (m)	Pile Depth (m)	Pile Diameter (m)	Total Pile Length (m)
A	4.27	2.44	3.73	0.36	146
B	4.27	4.88	4.27	0.41	179

(2) Soil and Other Conditions

The soil and other conditions at the proposed-soundwall location would not require nonstandard foundations. Standard foundations appear to be appropriate.

(3) A further investigation and analysis by geotechnical engineers during PS&E phase will be required with estimated schedule and hours:

Service	Estimated Hours	WBS Level 6	Estimated Duration
Field Work/Drilling	160	185.20	1 month*
Laboratory Analyses	80	185.20	1 month
Data Analyses/Design	80	185.20	0.5 month
Reporting	80	185.20	0.5 month
TOTAL	400	185.20	3 months

* Drilling may be delayed during the winter/spring period due to rainfall.

F. Design Details Required for Project

Pavement/shoulder rehabilitation or reconstruction _____ Yes

Drainage _____ Yes

Signs _____ Yes

Lighting _____ no

Utility Relocation _____ Yes

Structure Work _____ Yes

Highway Planting _____ Yes

Planting/Irrigation Modification _____ Yes

Ramp Metering _____ No

Other (Describe) Removal of Chain Link Fence for Soundwall B. Yes

G. Nonstandard Design Features

(1) Mandatory? No

(2) Advisory? No

H. Cost Estimate

Items	Project Cost ($)	Support Cost ($)	Support Cost (%)
PA/ED + Supplement/PR		38,640	8
PS&E		72,450	15
R/W	$24,000	9,660	2
Construction	$483,000	72,450	15
Total	$507,000	193,200	40

Note: (a) The Project Cost is based on Attachment C;
(c) The estimate for Support Cost is based on the data of previous projects in percentage to Construction Cost. It includes 4 phases as above in the table;
(d) The support-cost estimate generated from XPM Work Sheet (Attachments K-2 and K-3) is $771,300, about 160% of the construction cost. It is too high to be used for this project.

I. Analysis of Proposal

(1) Cost effectiveness

(a) ACCMA policies:

When Senate Bill 45 was signed into state law in 1997, the responsibility for funding soundwalls that are not part of new freeway construction devolved from Caltrans to the local Congestion Management Agencies (CMA). The proposed policies and process for CMA approval of soundwalls revised by ACCMA states:

"(i) Only residences developed prior to opening at the freeway will be considered for noise abatement.

(ii) The term "approaching" is defined as 2 decibels below the federal criterion of 67 decibels. A level of 65 decibels will be used to encompass the CMA's definition of "approaching 67 decibels."

(iii) The maximum amount of $45,000 per dwelling unit may be adjusted periodically to reflect current construction costs.

(iv) Soundwalls will not be considered for commercial areas and parking lots."

(b) Cost effectiveness:

With an estimated project capital cost of $507,000 and 16 residential units to be protected, the cost per unit is $31,688, which is less than the maximum amount of $45,000 in ACCMA's policies. So the proposed soundwall construction remains

cost effective.

(2) Noise Reduction

- 5 dBA reduction, minimum ? Yes

Based on the noise study conducted by Caltrans Environmental Engineering, a minimum noise reduction of 5 dBA can be achieved by construction of the proposed soundwall.

- 67 dBA noise level met? Yes

Total number of 16 homes exceeds 67 dBA noise level caused by freeway traffic.

- Line of sight to Truck Exhaust Stack Intercepted? N/A

This part of I-580 allows no heavy truck traffic.

J. Funding and Staffing

(1) Any Cooperative Features? No

(2) Project Support:

Attachment K-2 presents the needed resources and charge centers in hours and PY's for project support, which is also summarized in Section H above.

(3) Oversight Personnel Years (Caltrans Only): N/A

K. Programming and Scheduling

(1) Proposed Project Schedule (also see PYPSCAN, Attachment K-1):

Milestone	Date
NBSSR	06/2001
2000 STIP Amendment	11/2001
PA/ED + NBSSR Supplement/PR	03/2002
PS&E	10/2003
R/W Certification	12/2003
Ready To List	02/2004
HQ ADV	05/2004
Approved Contract	08/2004
JOB Completion	08/2005

(2) Proposed Budgetary Description:

- Soundwall Estimated Construction Cost: $507,000
- Candidate: 2000 STIP
- Note: Amendment and approval is required for this project to be programmed in 2000 STIP. It is suggested that ACCMA send a formal request to CALTRANS through MTC for the amendment and approval.

5. OTHER CONSIDERATIONS

A. System Planning

The MTC's RTP and ACCMA's 1998-2018 Long Range Transportation Plan "Transportation Vision 2018 and Beyond" do not anticipate future widening at this location. Caltrans' Route Concept Report for I-580 also does not expect future widening.

B. Hazardous Wastes

There is no evidence of hazardous waste at the sites of proposed soundwall construction.

- Has an Initial Site Assessment been completed? Yes Date: 08/08/2000

An initial site assessment (ISA) at the location of the proposed soundwall was conducted by the Caltrans Office of Environmental Engineering. There was a potential aerial lead contamination in the unpaved shoulder area for the proposed Soundwall A due to the aerial deposition of lead from motor vehicle exhaust. It was recommended to conduct soil testing during early PS&E stage. If the test reveals lead contamination in soil, the soil will be handled according to regulatory requirements. The cost is included in the estimate.

C. Historic Architectural Resource Studies

- Has a historic Site Assessment been completed? Yes Date: 02/16/2001

Because federal funds have contribution in the STIP funding source, Cultural Resources (Section 106) comply. A preliminary site assessment at the location was conducted by the Office of Environmental Planning South, indicating there is need for historic architectural studies at the site during PS&E phase.

D. Traffic Control

(1) Transportation Management Plan? Minor TMP Required

The construction of the soundwall will be located on the edge of shoulder for Soundwall A and along the Caltrans-Right-of-Way line (replacing exiting Chain Link Fence) for Soundwall B. A temporary K-Rail will be used for protection and separation between traffic and construction work. There is no lane closure required during the soundwall construction except for K-rail placement and removal. Lane closure charts are needed for

K-rail placement and removal. Based on preliminary studies conducted by Caltrans Traffic Planning, Traffic Control, Highway Operation and Transportation Management, the soundwall construction would not have any significant impact on the freeway and local roads.

(2) Any prolonged temporary ramp closures? Not Required

The construction of soundwall A on the undercrossing On-ramp Bridge at 14th Avenue does not require ramp closure. However, the single-on-ramp traffic lane will be narrowed to 3 (10') m from 3.7 m (12') by K-rail. It will serve as a temporary traffic lane during construction at off-peak hours between 9:00 a.m. to 3:00 p.m. There is no lane closure required during the soundwall construction except for K-rail placement and removal. Lane closure charts are needed for K-rail placement and removal.

E. Wetlands/Floodplain and Hydraulics

(1) Wetland/Floodplain
The proposed soundwalls are not located near any wetlands and floodplain.

(3) Hydraulics

The E Curb and AC surfacing will remain in place as shown on Attachments E-2 and F-1. The foundation of Soundwall A and the pile foundation of Soundwall B shall be placed as not to interfere with the drainage system at D-Line Station 20+40.

F. Permits required for Project

Agency	Yes / No	Date Contacted	Results
Fish & Game	No	N/A	N/A
Corp. of Engineers	No	N/A	N/A
Coastal Commission	No	N/A	N/A
BCDC (DST. 4)	No	N/A	N/A
Local flood control district	No	N/A	N/A
Construction Easement (R/W)	Yes	09/29/2000	Permit required before construction.
Utility Relocation	Yes	10/19/2000	Permit required before construction.

H. Right of Way (R/W)

- **General** – A right of way data sheet has been prepared based on the scope of work described and on the proposed plan. Estimated cost information is contained in the Right of Way Data Sheet in Attachment G. There are 2 temporary construction easements required for this job. All parcel requirements impact residential land.
- **Railroad** – There is no railroad involvement on this project.
- **Utilities** – Verifications of utilities will be required. Based on the site reviews, there is a power pole located at F-Line Station 225+00 in English unit, which is in Caltrans' Right of Way and may need to be relocated during construction. Determination of this need must be made by Design prior to PS&E in order for R/W to provide proper notice to the utility company.

6. PROJECT REVIEWS

District Program Advisor?	Yes	Date: 12/01/2000
Headquarters Program Advisor?	No	Date: 02/15/2001
PD Coordinator (Gordon Brown)?	Yes	Date: 01/30/2001
Design Reviewer (Gordon Brown)?	Yes	Date: 01/30/2001
FHWA Transportation Engineer?	N/A	Date: _____
Type of Federal Involvement	Exempt (Eligible for federal reimbursement)	

7. ENVIRONMENTAL STATUS

Based on the project's scope and location, a Preliminary Environmental Review concluded that the proposed soundwall construction will not have a significant effect on the environment. It will satisfy the requirements for a Categorical Exemption (CE) under CEQA and for a Categorical Exclusion under NEPA. However, this determination is contingent upon the existing project description. In addition, measures may be required to deal with the effects of the project on any sensitive environmental resources identified during the environmental study phase of the project. See Attachment J. Other issues will be further studied during PS&E phase as following:

A. Water Pollution Control

- Based on the estimate and evaluation, this project will disturb less than 2 hectares of soil and is not located within and environmentally sensitive area, Standard Special Provision (SSP) 7.34 applies and shall be included in the PS&E to address water

pollution control requirements. The project may be required to comply with the additional conditions of Caltrans' NPDES (Order No. 99-06-DWQ, CAS No. 000003) issued by the State Water Resources Control Board (SWRCB). A copy of this permit may be obtained from the SWRCB website at http://www.swrbc.ca.gov. Please note that the Contractor must prepare and implement a Water Pollution Control Program (WPCP) in accordance with this SSP to minimize the discharge of pollutants from the construction activities related to this project. Also, please write a memo to the Resident Engineer (RE) file stating that a copy of the WPCP shall be sent to the Construction NPDES Coordinator (i.e. Frank Gorham) for review.

- Based on the Preliminary Geotechnical Report (Attachment H), the groundwater level in the vicinity of the project varies from 2 to 8 m below ground surface (bgs). Since the footing of the walls will be 4.27 m bgs, depending on the type of footing that will be used in the project, it might be necessary to perform dewatering during construction. If dewatering will be performed during construction, the project engineer shall initiate a discussion with regards to handling and disposing of groundwater with the Office of Environmental Engineering. If such waters are to be discharged into receiving Waters of the State, appropriate Best Management Practices (BMPs) will be required to reduced or eliminate any discharge of pollution to the extent feasible as described in section A.9 of the Statewide General Construction Permit. A project-specific Waste Discharge Permit may be required if substantial dewatering is to be done. Also, the Hazardous Water Investigation group shall be responsible for testing the water for potential contamination. A dewatering SSP will prepared by us depending on the results of the water testing in order to ensure the proper handing and disposing of the water.

- Given the project working on residential streets (for access), there may be a need for contract specific controls (temporary drainage inlet protection). Following approval of this NBSSR, PS&E phase is required to send a request to the Cost Center in Landscape Architecture for erosion and sediment control recommendations. A similar request should go out to Environmental engineering as well.

B. Historic Architectural Resources Studies

Based on the preliminary inspection at the site, there is a need for historic architectural resources studies during PS$E phase as stated in Section 5C above.

8. PROJECT PERSONNEL

Name	Organization/Branch	Phone
Robert A. Anderson, Project Manager	Supervisor, Design Alameda I	(510) 286-6155
Chuan Chen, Project Engineer	Advance Planning	(510) 622-1665
Wellington B. Lee, Project Engineer	Advance Planning	(510) 622-5972
Ben Chuck	Senior, Advance Planning	(510) 286-5566
Michael Kay	Senior, Advance Planning	
Victor Zeuzem, Program Advisor	Senior, Environmental Engineering	(510) 286-5677
Shiang Yang	Environmental Engineering	(510) 286-5652
John Bither	Technical Liaison, HQ Structures APS (ESC)	(916) 227-8605
Jeff A. Fippin	HQ Office of Roadway Geotechnical Engineering – North	(916) 227-6980
Jennifer Muir	Right of Way Project Coordinator	(510) 286-5450

9. ATTACHMENTS

Attachment A. Location Map

Attachment B. Noise Barrier Strip Map (Layouts)

Attachment C. Preliminary Project Cost Estimate Summary

Attachment D. Aerial Photo of Proposed Soundwalls between 14th Avenue and Ardley Avenue in the City of Oakland, Alameda County, CA (1-22-98, 1:2400, 04-ALA-580, 22-101, CALTRANS ASC.9841, LOC.04-2, FL 610 mm)

Attachment E. Typical Sections:

- E-1. Typical Section of Soundwall A at F-Line Station 219+00 English (Based on As-Built-Plans, Structure & Construction Recommendations)
- E-2. Typical Section of Soundwalls A and B at Overlap Section (close to F-Line Station 221+75 English)
- E-3. Typical Section of Soundwall B (close to F-Line Station 224+00 English)
- E-4. Typical Section of Soundwall B with Construction Easement (close to F-Line Station 226+50 English)

Attachment F. As-Built-Plans:

- F-1. Pavement Elevations & Grading Contours with Soundwall Layouts
- F-2. Construction Details
- F-3. Drainage and Sanitary Sewers
- F-4. Highway Lighting

Attachment G. Right of Way Data Sheet

Attachment H. Preliminary Geotechnical Report

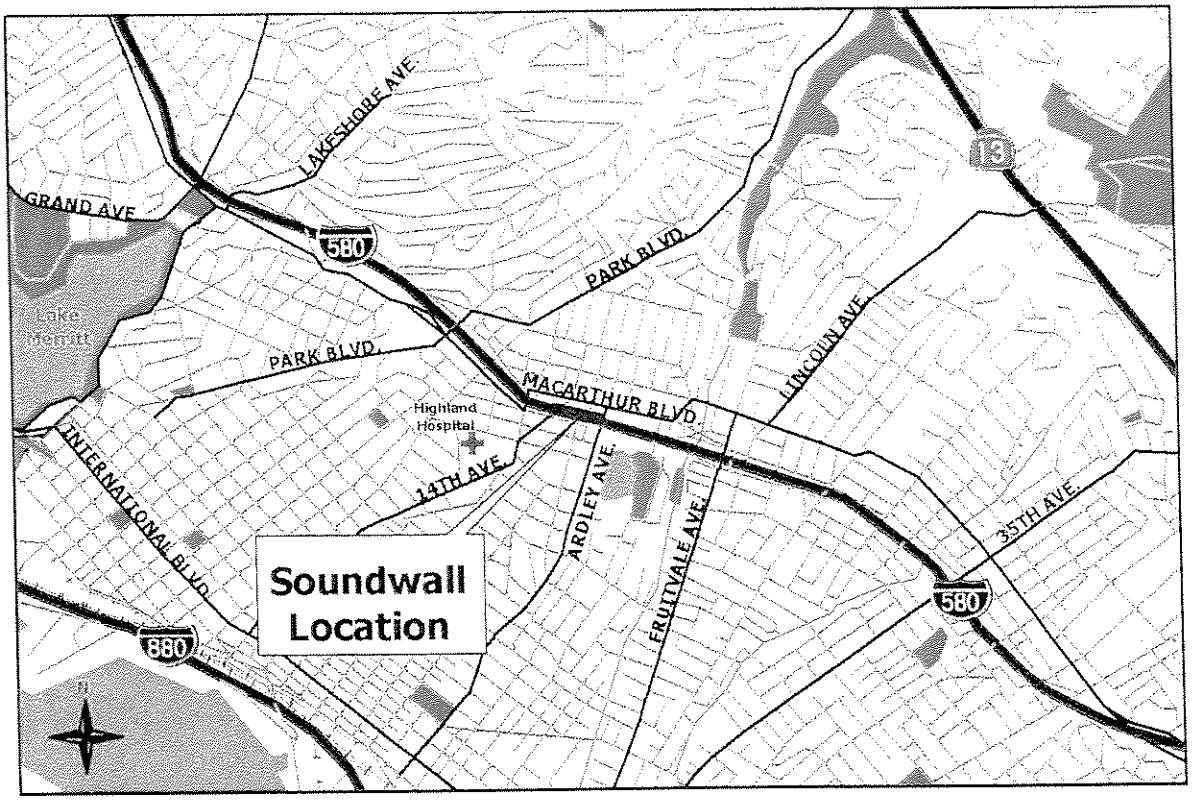
Attachment I. Preliminary Structure Design Report

Attachment J. Preliminary Environmental Review

Attachment K. PYPSCAN and XPM

Attachment L. NBSSR PERFORMANCE MEASURES

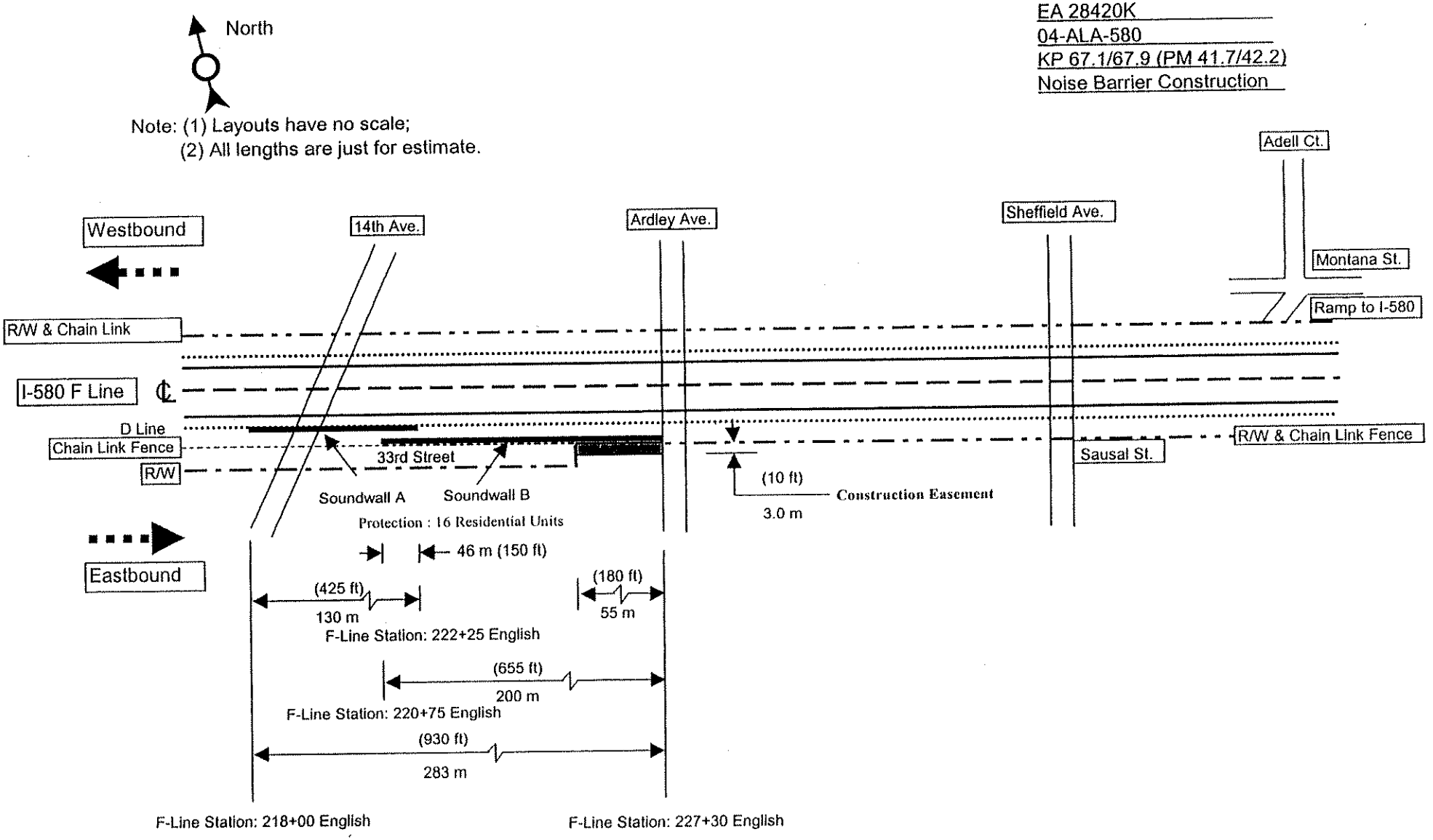
Attachment A. Location Map



Attachment A. Location Map

Attachment B. Noise Barrier Strip Map (Layouts)

EA 28420K
04-ALA-580
KP 67.1/67.9 (PM 41.7/42.2)
Noise Barrier Construction



Attachment B. Noise Barrier Strip Map (Layouts)

Attachment C. Preliminary Project Cost Estimate Summary

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

Project Description: Construct soundwall on south side of Eastbound Route 580 from 14th Avenue to Ardley Avenue in the City of Oakland, Alameda County.

Limits: 14th Avenue to Ardley Avenue

Proposed Improvement (Scope): Construct a soundwall on the Eastbound Route 580 from 14th Avenue to Ardley Avenue in the City of Oakland, Alameda County.

Alternative: 2 (Alternative 1 is no build.)

ROADWAY ITEMS	$ 483,000
STRUCTURE ITEMS	$ -
SUBTOTAL CONSTRUCTION	$ -
TOTAL RIGHT OF WAY (Current Value)	$ 24,000
TOTAL PROJECT COST	$ 507,000

Approved By Project Manager Signature Robert A. Anderson Phone No. (510) 286-6155 Date 6/5/01

Robert A. Anderson

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

I. ROADWAY ITEMS

Section 1 - Earthwork

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Roadway Excavation	150	m^3	$ 20	$ 3,000	
Roadway Fill				$ -	
Imported Borrow				$ -	
Clearing & Grubbing	LS		$ -	$ 12,000	
Develop Water Supply				$ -	
Removal of Chain Link Fence	200	m	$ 20	$ 4,000	
				Total Earthwork	$ 19,000

Section 2 - Pavement Structural Section*

	Quantity	Unit	Unit Price	Item Cost	Section Cost
New Pavement(____Depth)			$ -	$ -	
Pavement Overlay(____Depth)			$ -	$ -	
Asphalt Concrete			$ -	$ -	
Lean Concrete			$ -	$ -	
Cement-Treated Base			$ -	$ -	
Aggregate Base			$ -	$ -	
Aggregate Subbase			$ -	$ -	
Permeable Material Blanket & Edge Drains			$ -	$ -	
				Total Structural Items	$ -

Section 3- Drainage

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Large Drainage Facilities			$ -	$ -	
Storm Drains			$ -	$ -	
Pumping Plants			$ -	$ -	
Project Drain (X-Drain,oversize,etc)			$ -	$ -	
Others			$ -	$ 20,000	
				Total Drainage	$ 20,000

* Attach sketch showing typical structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

Section 4- Specialty Items

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Retaining Walls		m^2	$ -	$ -	
Soundwalls	1409	m^2	$ 150	$ 211,350	
Cast-in-Drilled-Hole Concrete Pile (Soundwall A)	146	m	$ 120	$ 17,520	
Cast-in-Drilled-Hole Concrete Pile (Soundwall B)	179	m	$ 120	$ 21,480	
Remove Bridge Railing (Type 1 for Soundwall A)	58	m	$ 150	$ 8,700	
Remove Concrete (Soundwall A)	2	m^3	$ 2,000	$ 4,000	
Minor Concrete (Barrier Slab for Soundwall A)	12	m^3	$ 800	$ 9,600	
Concrete Barrier (Type 27 for Soundwall A)	58	m	$ 250	$ 14,500	
Equipment/ Animal Passes			$ -	$ -	
Relocate Private irrigation Facilities			$ -	$ -	
Landscaping/ Irrigation (normally separate project)			$ -	$ 32,000	
Erosion Control	3967	m^2	$ 0.80	$ 3,174	
Water Pollution Control (during construction, including temporary drainage inlet protectior				$ 1,500	
Barriers and Guardrails		m		$ -	
Hazardous Waste Work	50	m^3	$ 300	$ 15,000	
Environmental Mitigation			$ -	$ -	
				Total Specialty Items	$ 338,824

Section 5 - Traffic Items

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Lighting			$ -	$ -	
Traffic Signals			$ -	$ -	
Permanent Signing			$ -	$ -	
Traffic Control Systems			$ -	$ -	
Traffic Management Plan (K-rail placement & removal)	1	PCMS	$ 1,000	$ 1,000	
Temporary Railing (Type K)	259	m	$ 80	$ 20,720	
Others			$ -	$ -	
				Total Traffic Items	$ 21,720

TOTAL SECTIONS 1-5 $ 400,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

Section 6 - Minor Items

		Unit Cost			Section Cost
Subtotal Section 1-5	$ 400,000	x 5%	= $	20,000	
			Total Minor Items		$ 20,000

Section 7 - Roadway Mobilization

Subtotal Section 1-5	$ 400,000			
Minor Items	$ 20,000			
Sum	$ 420,000	x 0% =	0	
		Total Roadway Mobilization		0

Section 8 - Roadway Additions

Supplemental Work				
Subtotal Sections 1-5	$ 400,000			
Minor Items	$ 20,000			
sum	$ 420,000	x 5% =	$ 21,000	
Contingencies				
Subtotal Sections 1-5	$ 400,000			
Minor Items	$ 20,000			
sum	$ 420,000	x (10%)* =	$ 42,000	
		Total Roadway Additions		$ 63,000

TOTAL ROADWAY ITEMS (Total of Sections 1-8) $ 483,000

Estimate Prepared by: Chuan Chen Phone: (510) 622-1665 Date: 12-18-2000
(Prite Name)

Estimate Checked by: Wellington B. Lee Phone: (510) 622-5972 Date: 12-27-2000
(Prite Name)

* Use 25% at the PSR stage or a higher or lower rate if justified.

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

II. STRUCTURES ITEMS

	Units	Structure 1	Structure 2	Structure 3	Structure 4 & 5
Bridge Name					
Structure Type					
Width (out to out)	m	0	0	0	0
Span Lengths	m	0	0	0	0
Total Area	m^2	0	0	0	0
Footing Type (pile/spread)					
Cost *	per m^2	0	0	0	0
Total Cost Per Structure		$ -	$ -	$ -	$ -

* - includes 10% mobilization and 20% contingency

Subtotal Structures Items - $ -

Railroad Related Costs: $ -

Subtotal Railroad Items $ -

TOTAL STRUCTURES ITEMS - $ -
(Sum of Structures plus Railroad Items)

Comments:

All structures items have been incorporated in Section 4 - Specialty Items.

Estimate Prepared by: Majid Madani Phone: (916) 227-8366 Date: 09-12-2000
(Prite Name)

(If appropriate, attach additinoal pages and backup)

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-Ala-580
KP: 67.1 / 67.9
PM: 41.7 / 42.2
EA: 28420K

III. RIGHT OF WAY ITEMS

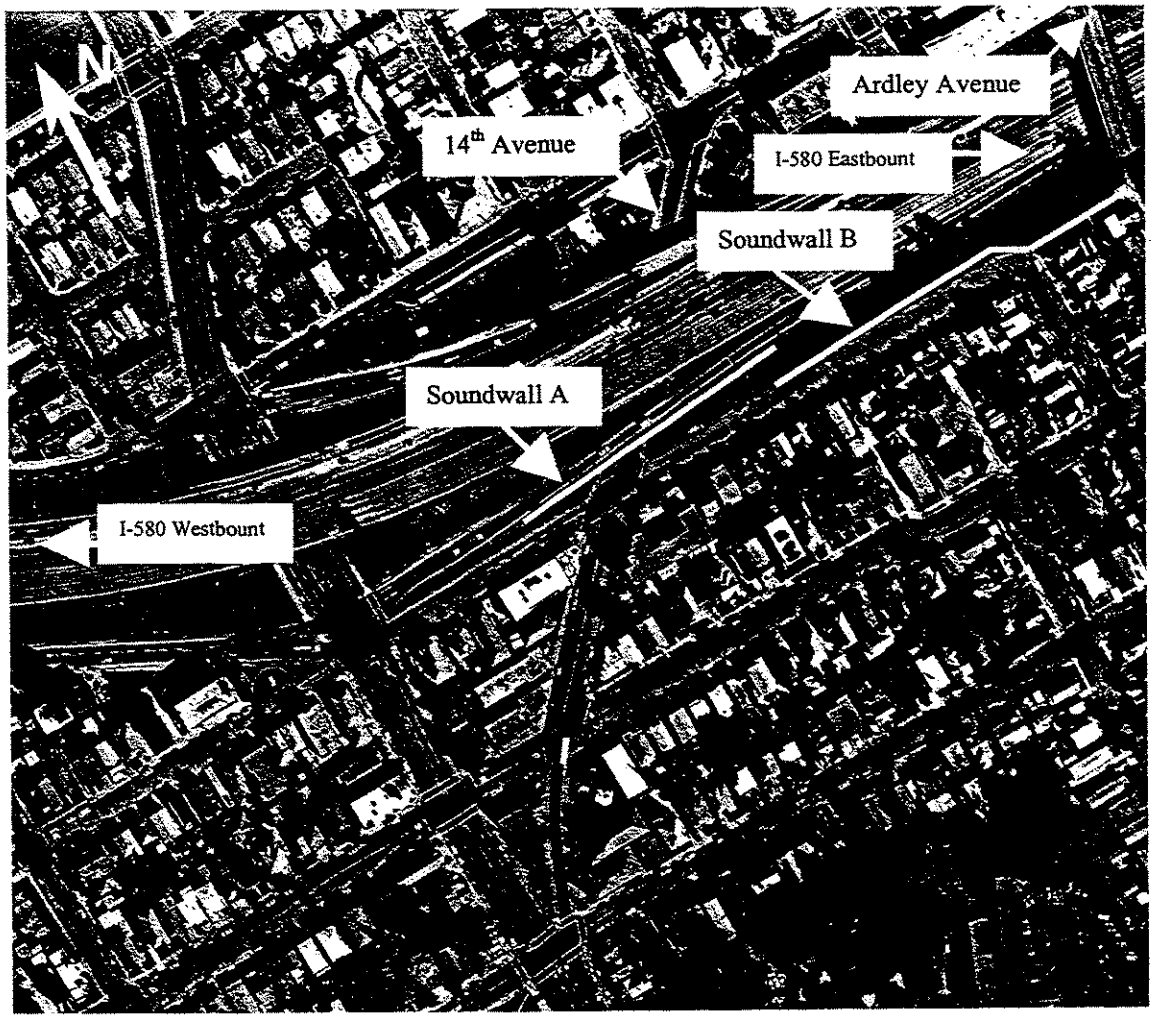
	Current Values (Future Use)	Escalation Rates	Escalated Values*
Acquisition, including excess lands and damages to remainders(s)	$ 4,000	9%	$ 4,360
Unitility Relocation (State share)	$ 20,000	9%	$ 21,800
Clearance/Demolition	$ -	%	
RAP	$ -	%	
Title and Escrow Fees	$ -	%	
CONSTRUCTION CONTRACT WORK	$ -	%	

TOTAL RIGHT OF WAY (CURRENT VALUE)** $ 24,000
TOT.ESC.R/W $ 26,160

Comments: Right of Way Lead Time will require a minimum of 14 months after the final right of way requirements (PYPSCAN node No. 224) is received, necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), Right of Way Lead Time will require a minimum 11 moths prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suites to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Estimate Prepared by: Allison Paich Phone: (510) 286-5476 Date: 10-19-2000
(Prite Name)

Attachment D. **Aerial Photo of Proposed Soundwalls between 14th Avenue and Ardley Avenue in the City of Oakland, Alameda County, CA (1-22-98, 1:2400, 04-ALA-580, 22-101, CALTRANS ASC.9841, LOC.04-2, FL 610 mm)**



Aerial Photo of Proposed Soundwalls between 14th Avenue and Ardley Avenue in the City of Oakland, Alameda County, CA (1-22-98, 1:2400, 04-ALA-580, 22-101, CALTRANS ASC.9841, LOC.04-2, FL 610 mm).

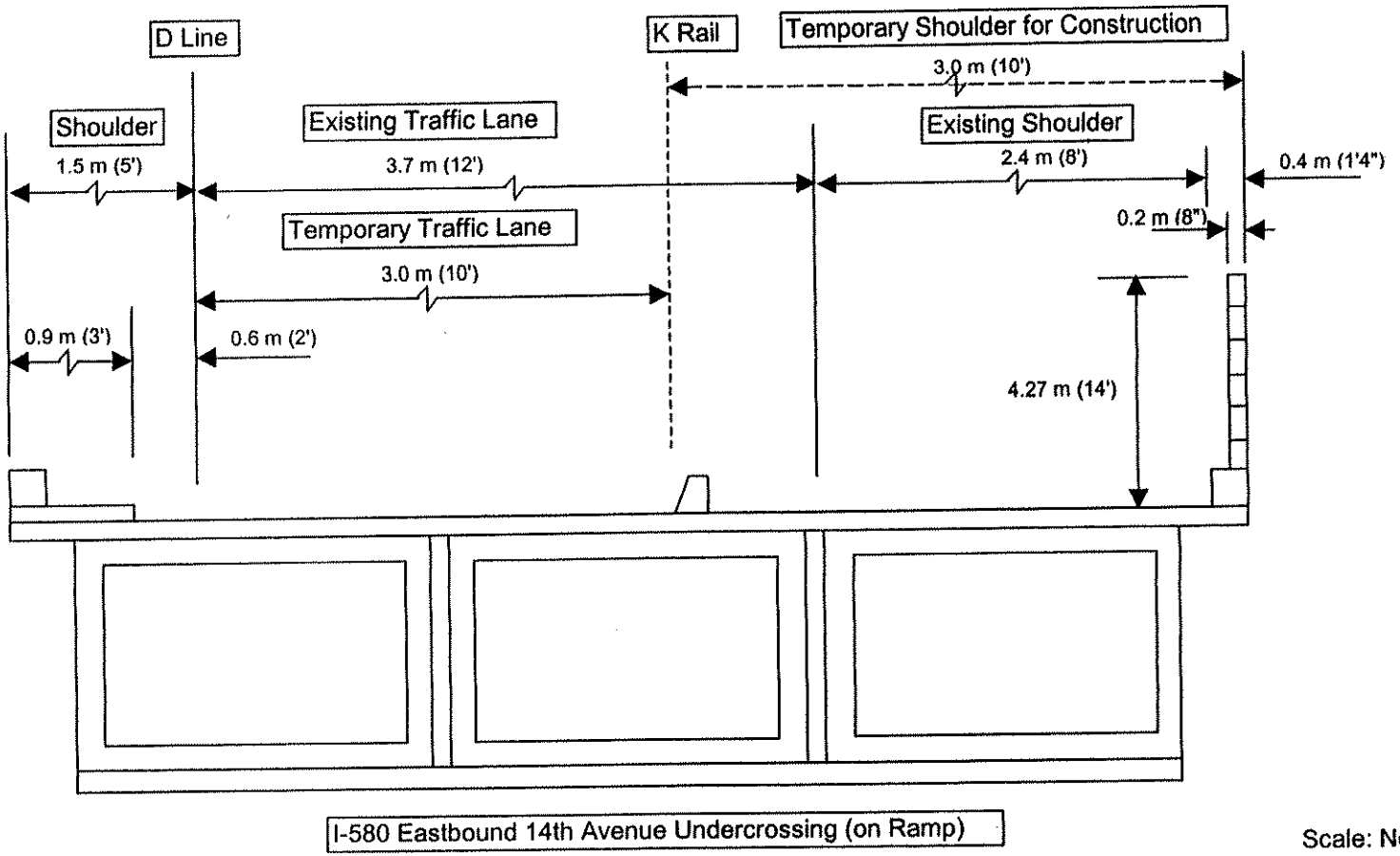
Attachment E. **Typical Sections:**

E-1. Typical Section of Soundwall A at F-Line 219+00 (Based on As-Built-Plans, Structure & Construction Recommendations)

E-2. Typical Section of Soundwalls A and B at Overlap Section (close to F-Line Station 221+75 English)

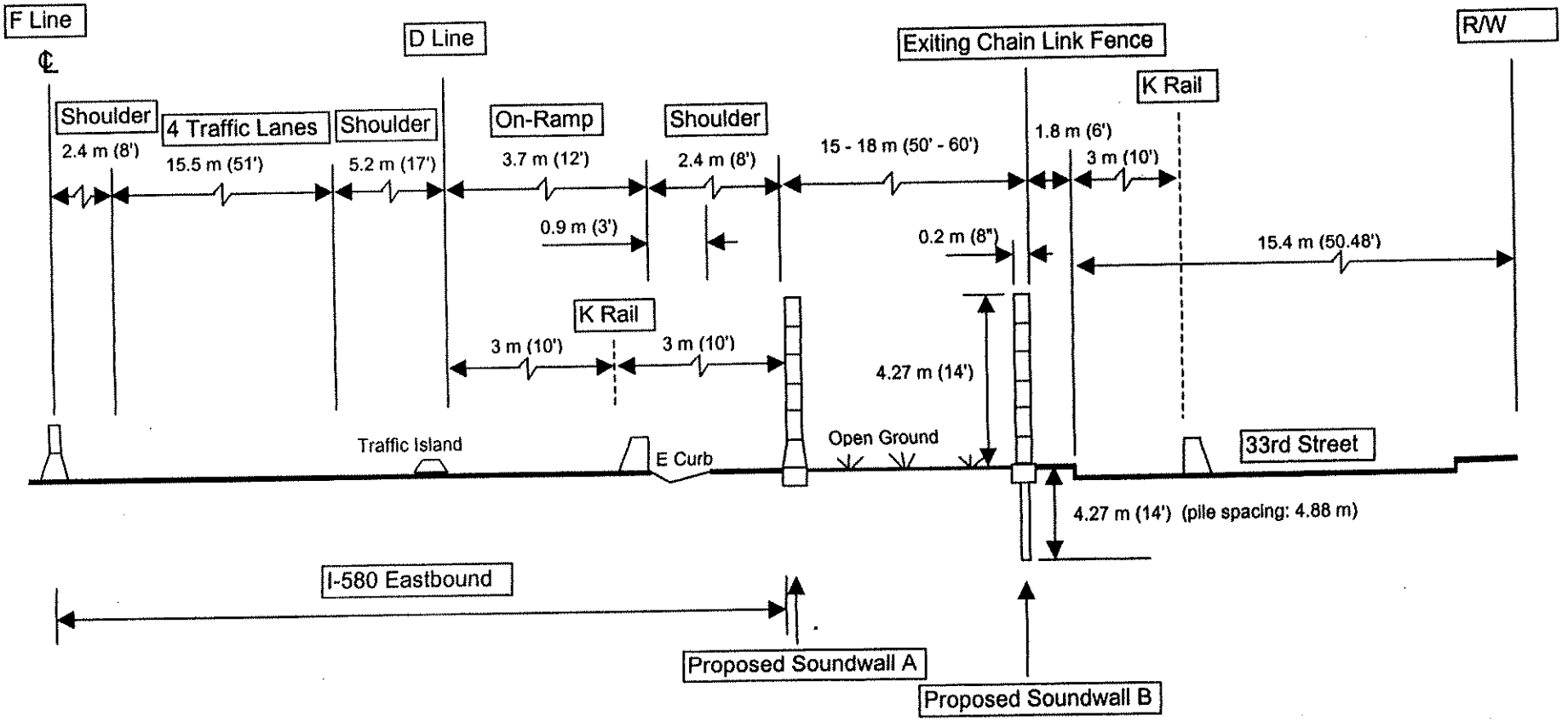
E-3. Typical Section of Soundwall B (close to F-Line Station 224+00 English)

E-4. Typical Section of Soundwall B with Construction Easement (close to F-Line Station 226+50 English)

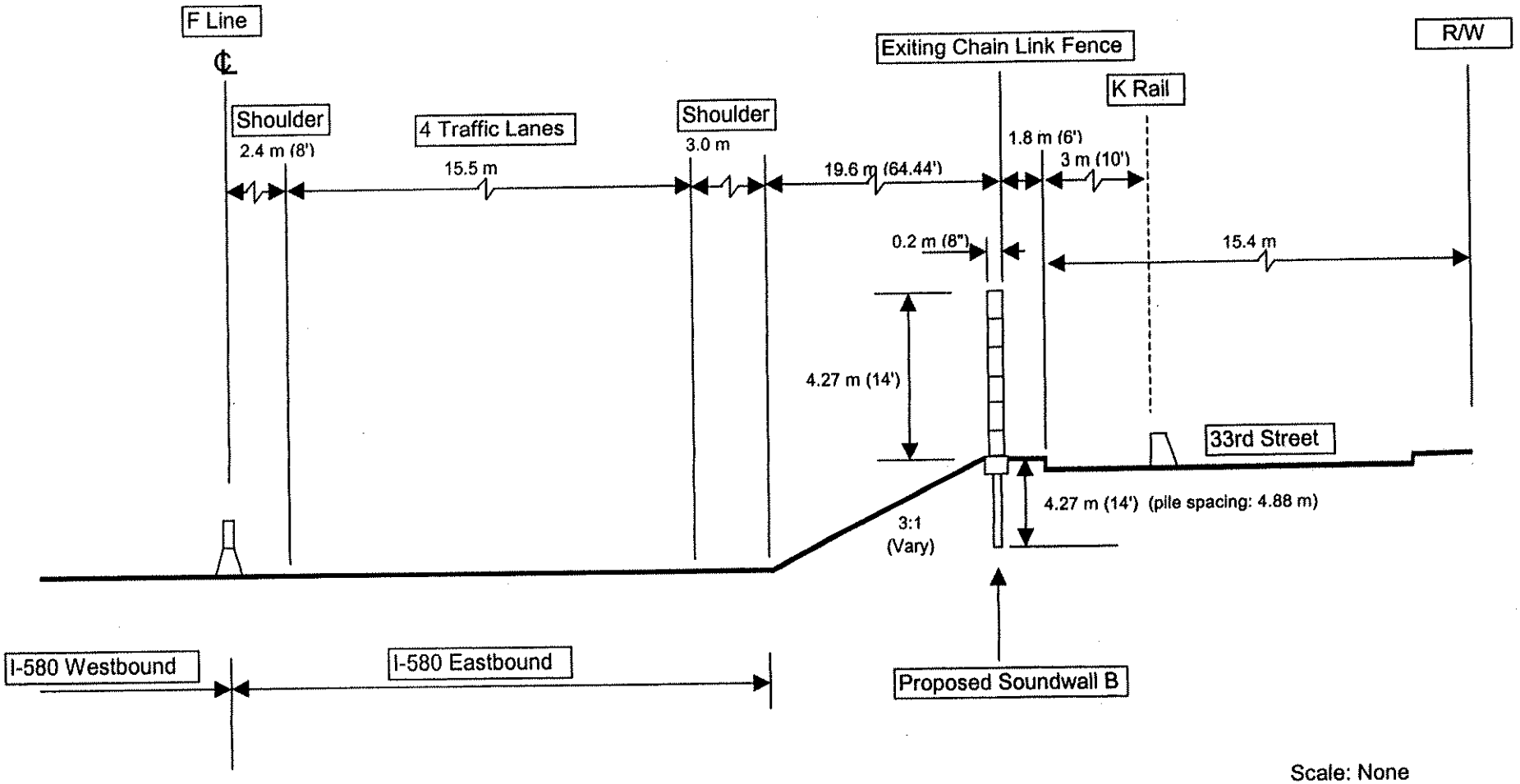


E-1. Typical Section of Soundwall A at F-Line Station 219+00 English
(Based on As-Built-Plans, Structure & Construction Recommendations)

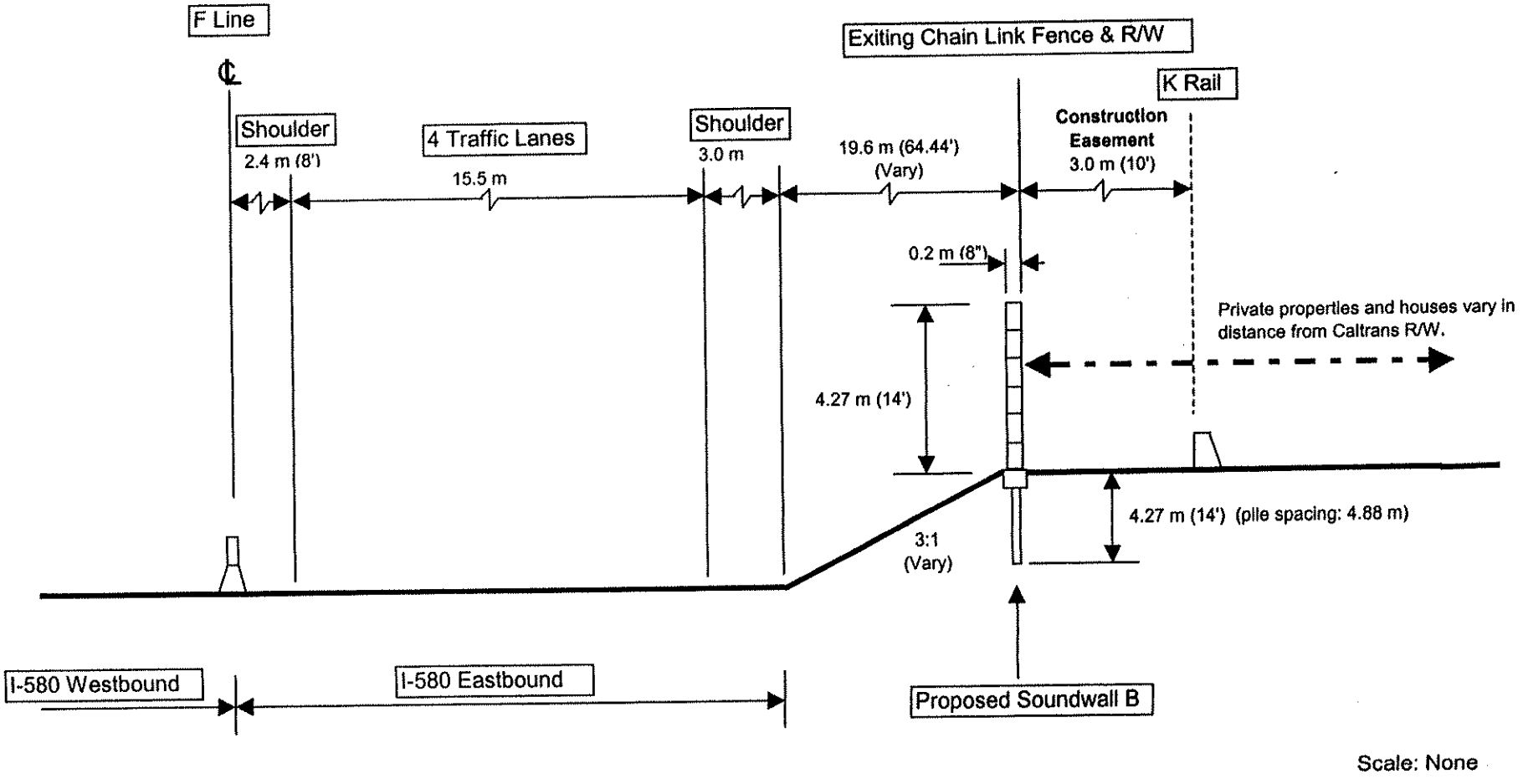
Note: (1) The foundations of the soundwalls shall avoid the drainage system as shown on Attachment F-1;
(2) Existing E Curb with the 1.5-m (5') shoulder remains in place;
(3) Scale: none.



E-2. Typical Section of Soundwalls A and B at Overlap Section (close to F-Line Station 221+75 English)



E-3. Typical Section of Soundwall B (close to F-Line Station 224+00 English)



E-4. Typical Section of Soundwall B with Construction Easement (close to F-Line Station 226+50 English)

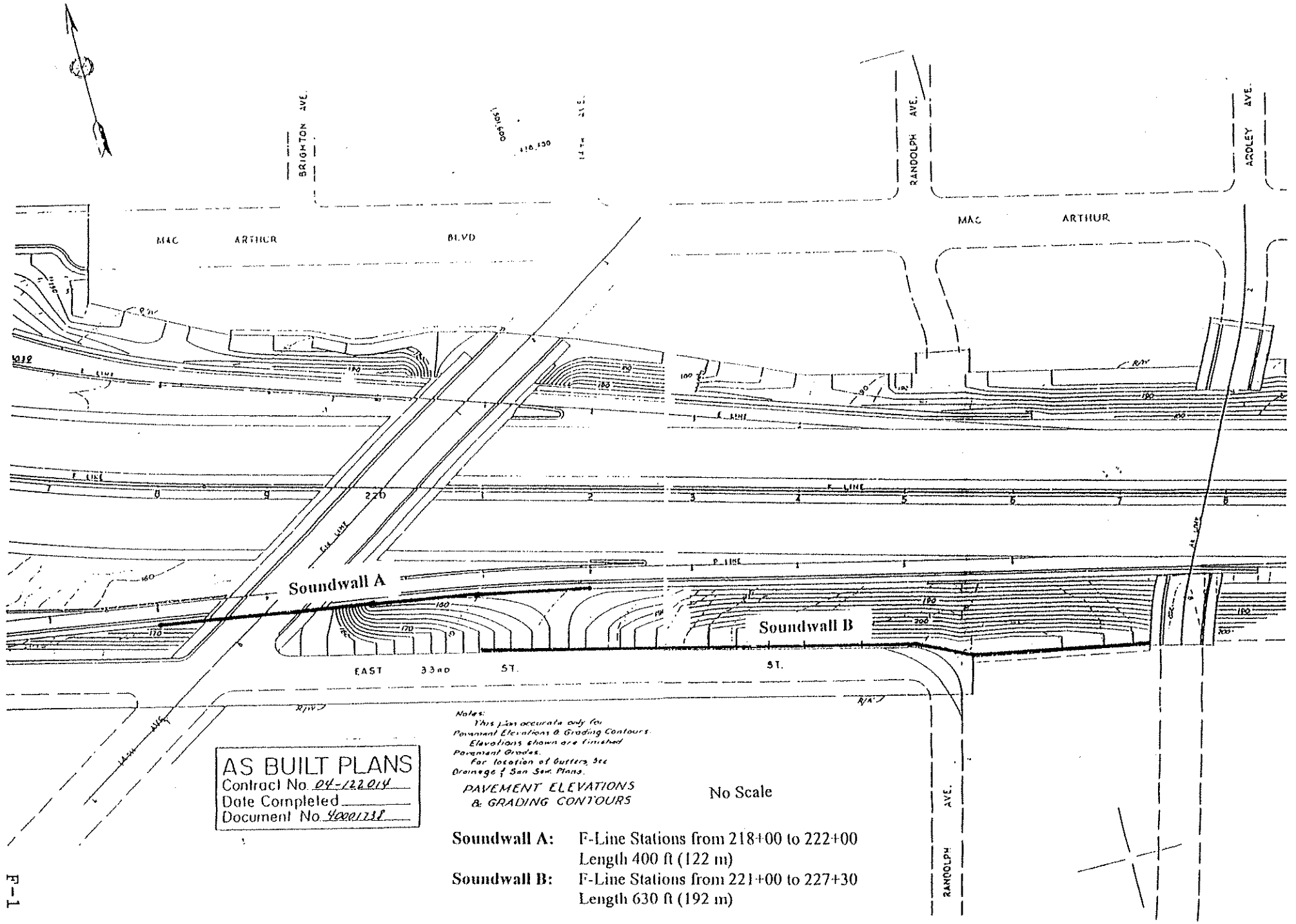
Attachment F. **As-Built-Plans:**

F-1. Pavement Elevations & Grading Contours with Soundwall Layouts

F-2. Construction Details

F-3. Drainage and Sanitary Sewers

F-4. Highway Lighting



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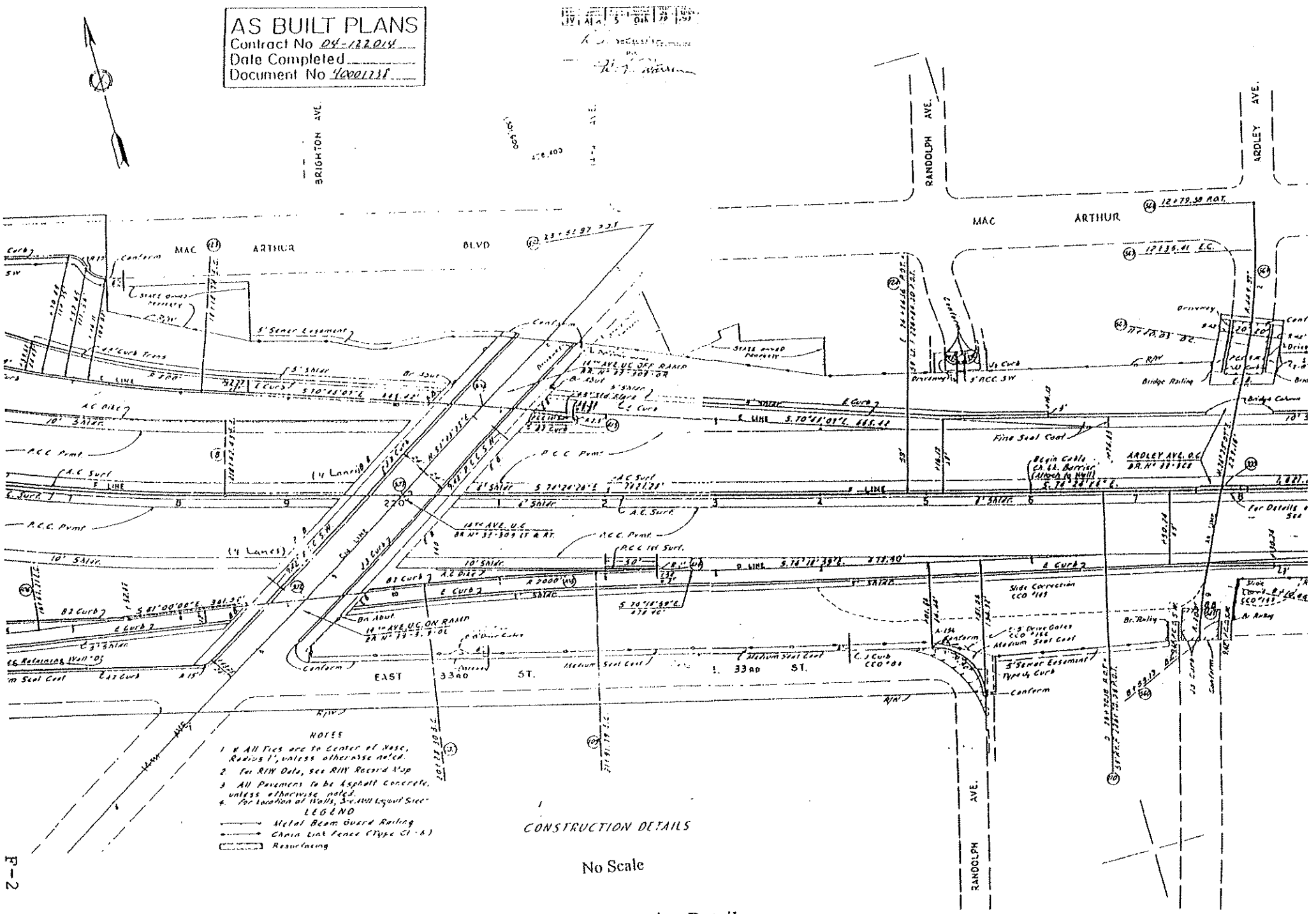
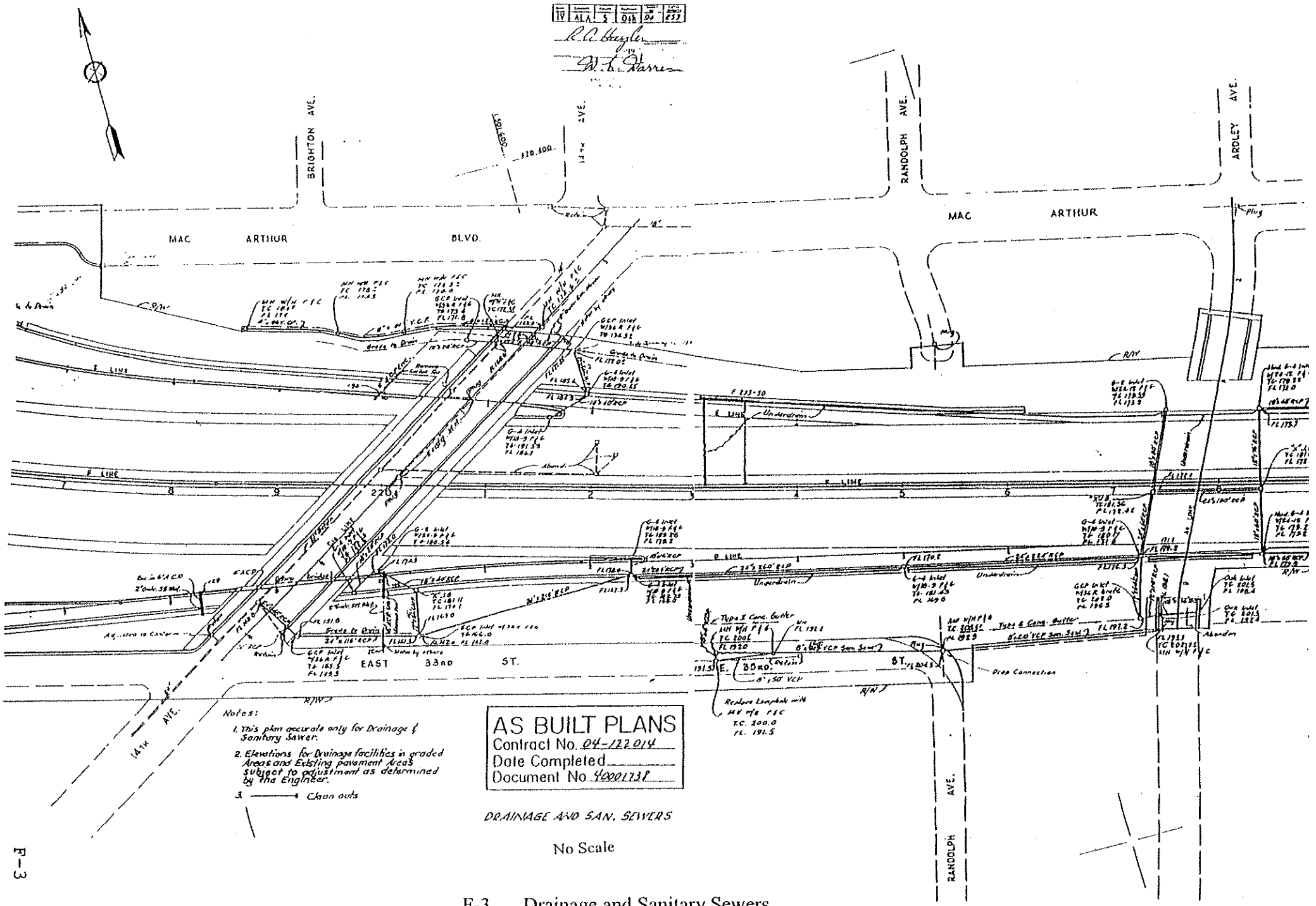
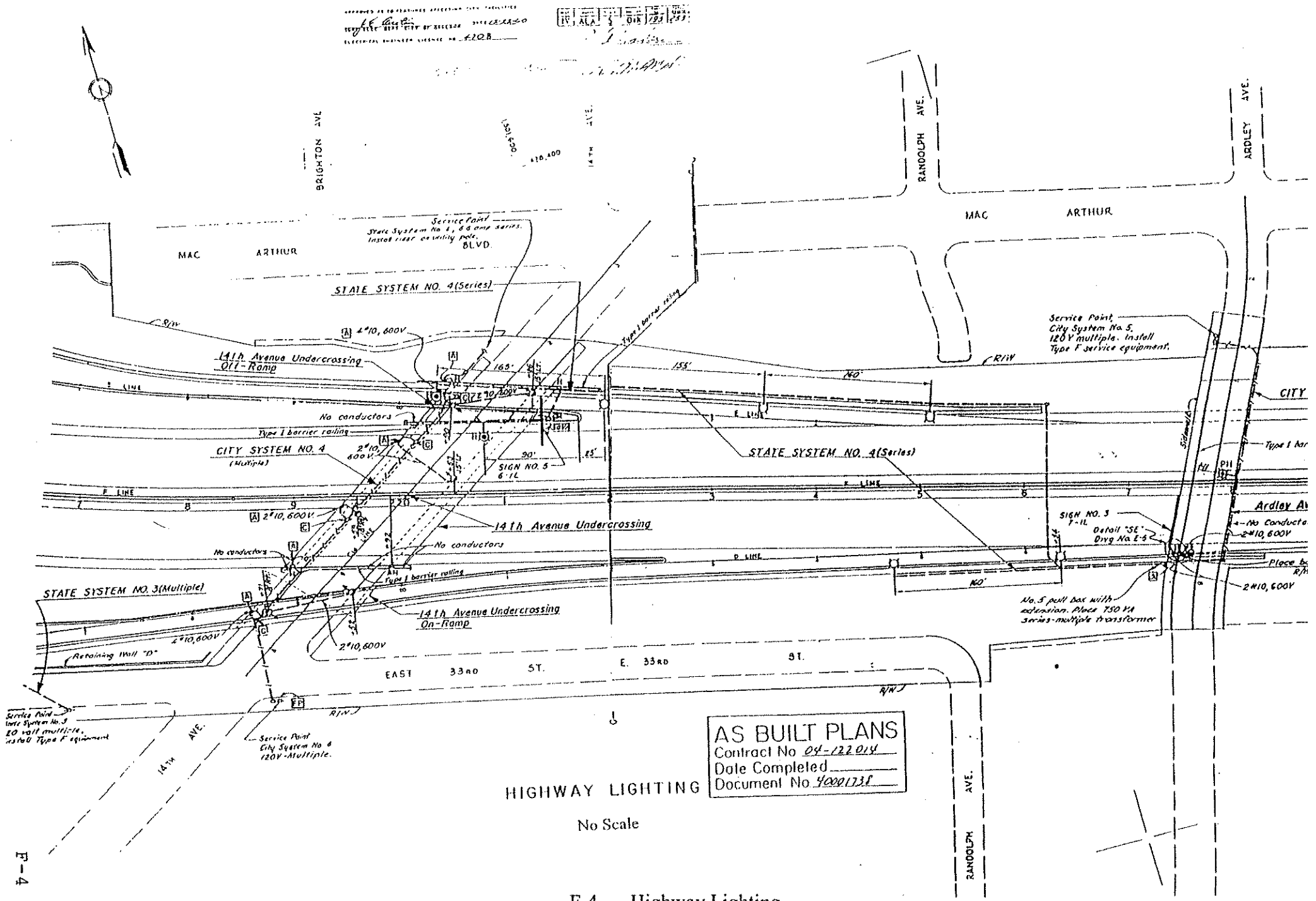


F-2

F-2. Construction Details



F-3. Drainage and Sanitary Sewers



HIGHWAY LIGHTING

No Scale

F-4

F-4. Highway Lighting

 4252

To: Ben Chuck

Date 10-0600
Dist. 4 Co. Ala Rte. 580 P/M 4.7/4.22
E.A. 28420K
Project Description Noise Barrier Construction

Attention:

From: MICHAEL T. MCCUE
Right of Way Capital
Coordinator

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on , and the following assumptions and limiting conditions:

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. This estimate does not include $_____ right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of way Lead Time will require a minimum of 14 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 11 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Michael T. McCue
Right of Way Capital Coordinator

Attachments:

[ ] Right of Way Data Sheet - Page One (always required)
[ ] Right of Way Data Sheet - All Pages (required when interest in real property is being acquired)
[ ] Utility Information Sheet
[ ] Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: District Brach Chief, Traffic

Date 9/29/00 4252

Dist 04 Co Ala Rte 580 KP 67.1/67.9

ATTN: Ben Chuck

EA 28420K

Project Description: Construction of a noise barrier.

SUBJECT: Right of Way Data – Alternate No. **1 of 1**

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate (3%/Yr x 3Yrs)	Escalated Value
A.	Acquisition, including Excess Lands and Damages	$ 4,000.00	9%	$ 4,360.00
B.	Loss of Goodwill	$ 00.00	%	$ 00.00
C.	Utility Relocation (State Share)	$ 00.00	%	$ 00.00
D.	Relocation Assistance	$ 00.00	%	$ 00.00
E.	Clearance/Demolition	$ 00.00	%	$ 00.00
F.	Title and Escrow Fees	$ 00.00	%	$ 00.00
G.	Current Value (Future Use)	$ 00.00	%	$ 00.00
H.	TOTAL ESCALATED VALUE			$ 4,360.00 RT $4,400.00
I.	Construction Contract Work	$ 00.00		

2. Anticipated Date of Right of Way Certification: Not available

3. Parcel Data:

Type		Dual/Appr	Utilities		RR Involvements	
X			U4-1		None	X
A	2		-2		C&M Agrmt	
B			-3		Svc Contract	
C			-4		Lic/RE/Clauses	
D			U5-7	6		
E			-8		Misc R/W Work	
F			-9		RAP Displ	0
					Clear Demo	0
Total	2				Const. Permits	0
					Condemnation	0

Areas: Right of Way (TCE) 1,800 sf No. Excess Parcels None Excess

Enter PMCS Screens 10 / 3 / 00 by JR

Enter AGRE Screen (Railroad data only) / / by

4. Are there any major items of construction contract work?
Yes ☒ No ☐ (If yes, explain)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required ☐

A TCE will be required to complete the construction of the proposed sound wall. Based on the information provided the estimated area of the TCE is 1,800 square feet. The TCE will affect the rear yards of the following properties.

APN	USE
O26 -0802-021-01	Single Family Home
026 -0802-034-00	Single Family Home

6. Is there an effect on assessed valuation?
Yes ☐ Not Significant ☐ No ☒ (If yes, explain)

7. Are utility facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Utility Information Sheet Exhibit 01-01-05)

Verifications are required.

8. Are railroad facilities or rights of way affected? Yes ☐ No ☒
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒ (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)

No. of single family _____ No. of business/non profit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is Anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there material borrow and/or disposal sites required? Yes ☐ No ☒
(If yes, explain)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☒
(If yes, explain)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and/or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 14 months

15. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

1. This estimate is based on a review of memorandum and addendum provided by Ben Chuck.
2. This estimate was completed without the benefit of a hazardous waste report.

Evaluation Prepared By: ALEXANDER GERSHTEIN

Right of Way: Name _____ Date 9-29-00

Railroad: Name _____ Date 9-27-00

Utilities: Name _____ Date 9-27-00

Recommended for Approval:

Michael T. McVey
Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and find this Data Sheet complete and current.

Chief, R/W Appraisal Services

10-5-00
Date

cc: Program Manager
Project Manager

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

   East Bay Municipal Utility District (2), City of Oakland, Pacific Gas and Electric Co., Pacific Bell, AT&T B.S.

2. Types of facilities and agreements required:

   Sewer, Water, Gas, Electric, Telephone, TV Cable.

3. Additional information concerning utility involvements on this project:

   Verifications will be required.

4. PMCS Input Information

Utility Involvements

U-4-1		5-7	6
-2		-8	
-3		-9	
-4			

Prepared by:

Right of Way Utility Estimator

9-27-00
Date

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

R/W DATA SHEET UPDATE MEMO

(Form #)

EXHIBIT
13-EX-14 (Rev. 9/96)

To: ALLISON PAICH
District Branch Chief
Planning and Management

Date: October 19, 2000

EA: 28420K

From: R/W Utilities

Subject: R/W Utilities Budget Update

Please update Utilities budget information for the above-mentioned project as follows:

1. Workloads:

U4:	1 ___		U5:	7 5	
	2 ___			8 ___	
	3 ___			9 1	
	4 ___				

2. R/W Utility Capital Funding (total amount):

FY 02 $ 20,000.00

FY _____ $_____

FY _____ $_____

3. Schedules:

Utility Maps to R/W ___/___/___

Recommended R/W Utility Leadtime: _____ months

4. Remarks: Project Engineer suspects that a P.G.& E Utility pole may be an involvement in this project. While this may be considered unusual in a noise barrier project, we wish to revise the Right of Way Data Sheet to reflect a Utility Relocation figure of $20,000. U-5-7 shall be changed to 5, and U-5-9 to 1. All other entries on the Data Sheet will remain the same.

Laura Hameister
District Branch Chief
R/W Utilities

Attachment H. Preliminary Geotechnical Report

Memorandum

To : MR. CHUAN CHEN - 04
Project Engineer

Date : August 2, 2000

File No. : 04-Ala-580 KP 67.1/67.9
(PM 41.7/42.2)
04-28420K

From : **DEPARTMENT OF TRANSPORTATION**
ENGINEERING SERVICE CENTER
Division of Structural Foundations - MS#5

Subject : Preliminary Geotechnical Report

Introduction

Per your request, we are providing this Preliminary Geotechnical Report (PGR) for a proposed noise barrier (soundwall) to be constructed along the eastbound direction of I-580 between KP 67.7 and 67.9 in Alameda County.

The descriptions and recommendations in this Preliminary Geotechnical Report (PGR) are based upon a site visit, a review of information forwarded by your Office and a review of the files for nearby bridges. No subsurface exploration, laboratory testing, or analyses were performed for this report. Therefore, actual conditions may vary from those assumed herein. Recommendations for the section of wall on the 14th Avenue Overcrossing bridge are not included in this memorandum and should be addressed by the Office of Structure Design and/or the Office of Structural Foundations.

Existing Facilities and Proposed Improvements

At the project site (KP 67.1 to 67.9), I-580 is an eight-lane divided highway, running approximately east-west through the city of Oakland. The proposed walls extend from the Beaumont Avenue On-Ramp eastward to the Ardley Avenue Overcrossing. The soundwall will be composed of two sections of wall, as shown in Figure 1. Part A will be constructed along the soft shoulder of eastbound I-580, and will cross the14th Avenue Undercrossing On-Ramp (Bridge #33-309-OL), as shown in Figure 2. Part A of the wall will be masonry block on barrier and will vary in height between 3.66 m and 4.27 m. Part B, as shown in Figure 3, is to replace the existing chain link fence that runs along 33rd Street on the Caltrans right-of-way line. This section of wall is planned to be masonry block with a constant height of 4.27 m.

Pertinent Reports and Investigations

In preparing this report, we have reviewed the following bridge files

1. 13th Avenue Overcrossing - Br. No.33-0311
2. Beaumont Avenue Undercrossing - Br. No. 33-0310
3. 14th Avenue Undercrossing - Br. No. 33-0309
4. Ardley Avenue Overcrossing - Br. No. 33-0308
5. Sheffield Avenue Overcrossing - Br. No. 33-0325

These files contain memoranda from design and construction as well as the logs of borings performed for the original designs. The near surface soils are described as alluvial deposits consisting of interbedded loose to dense clayey, sandy gravel and stiff to hard silty clay. In these previous geotechnical borings, groundwater was encountered at various depths

from 2 to 8 m below the ground surface. Bedrock was not encountered within the depths drilled in the previous explorations near the project site.

Site Visit

A site visit for this report was performed on July 20, 2000. No subsurface exploration, sampling, or testing was performed.

The highway runs along the base of the Oakland Hills. Based on the topography adjacent to the highway, the highway appears to be built on both fill and cut. Based on the elevations of Beaumont Avenue and 14th Avenue, the on-ramp at Beaumont Avenue appears to be built on fill. Part A of the wall will be constructed on this fill. 33rd Street runs parallel to the highway to the south. As this street heads east from 14th Avenue, it climbs a hill. The slope composing the southern shoulder of the highway is the side of this hill. Part B of the planned wall will run along the top of this slope. This slope is approximately 3:1 (H:V) towards the highway.

The landscaping along the roadway shoulder is very thick and mature. Ivy, bushes and various trees cover the right-of-way. Fairly large trees follow the alignment of Part B of the wall.

Geotechnical Recommendations

The investigation for this PGR was based upon site reconnaissance and document review and presents an appropriate level of detail for preliminary project design and evaluation. We anticipate that both sections of the wall (with the exception of that portion of Part A, which sits on the 14th Avenue Bridge) should be supported on cast-in-drilled-hole (CIDH) concrete piles. Based on our review of the existing subsurface information, the Bridge Standard Details for masonry block soundwall on barrier (XS 3-57) and masonry block soundwall on pile cap (XS 3-59) appear to be appropriate for design of the soundwall foundation system.

Preliminary approximations of the soil strengths were used to estimate the foundation design as follows. Along Part A of the wall, the ground surface is flat on both sides. The CIDH piles supporting this section of wall should be designed in accordance with Case 1 parameters listed on the Bridge Standard Detail sheet for masonry block on barrier (sheet XS 3-57.3). Because much of Part B of the wall runs along the top of a slope, it is appropriate to utilize the Case 2 design parameters listed on the Bridge Standard Detail sheet for masonry block on pile cap (sheet XS 3-59.3). The following table summarizes the preliminary design parameters for the soundwall foundation:

TABLE 1 – PRELIMINARY DESIGN PARAMETERS FOR CIDH PILES

Wall Section	Wall Height (m)	Pile Spacing (m)	Pile Depth (m)	Pile Diameter (m)
Part A	3.66	3.05	3.73	0.36
Part A	4.27	2.44	3.73	0.36
Part B	4.27	4.88	4.27	0.41

Proposed Future Investigations

To better evaluate the site's specific foundation considerations, a subsurface exploration and testing program will be employed during the project PS&E phase. Future investigation work will include geotechnical drilling, sampling, laboratory testing, and data analyses work in support of the Geotechnical Design Report (GDR).

We have summarized in the table below the proposed scope of future services along with the associated hours and duration to complete. The total duration may be less than the estimated duration for each activity as it represents the likely overlap of laboratory testing, data analyses, and GDR preparation. If the project scope changes, the amount of exploration may need to be revisited.

TABLE 2 – ESTIMATED SCHEDULE FOR FUTURE INVESTIGATIONS

Service	Estimated Hours	WBS Level 6	Estimated Duration
Field Work/Drilling	160	185.20	1 months*
Laboratory Analyses	80	185.20	1 months
Data Analyses/Design	80	185.20	.5 months
Reporting	80	185.20	.5 months
TOTAL	400	185.20	3 months

*Drilling may be delayed during the winter/spring period due to rainfall

If you have any questions or comments, please call me at (916) 227-6980 or CalNet 498-6980.

CE 58935

JEFF A. FIPPIN, P.E.
Transportation Engineer - Civil
Office of Roadway Geotechnical Engineering - North

Attachments

c: RHPrysock
CHannenian
RGEN.01

Attachment I. Preliminary Structure Design Report

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

RCVD BY: JTY

IN EST: 9/11/00
OUT EST: 9/13/00

BRIDGE: 14TH AVENUE. UC (RAMP) BR. No.: 33-03090L DISTRICT: 04
TYPE: CONSTRUCT SOUNDWALL RTE: 580
CU: 04-000 CO: ALA
EA: 28420K KP: 67.10
LENGTH: WIDTH: AREA (SQ. M)=

DESIGN SECTION: 14
OF STRUCTURES IN PROJECT: 01 EST. NO. 1
PRICES BY: GM COST INDEX:
QUANTITIES BY: GM DATE: 9/12/00
QUANTITIES CHECKED BY: DATE:

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
1	TEMPORARY RAILING (TYPE K)	K	M	104	$80.00	$8,320.00
2	REMOVE BRIDGE RAILING (TYPE 1)		M	58	$150.00	$8,700.00
3	REMOVE CONCRETE		M3	2	$2,000.00	$4,000.00
4	MINOR CONCRETE (BARRIER SLAB)		M3	12	$800.00	$9,600.00
5	CONCRETE BARRIER (TYPE 27)		M	58	$250.00	$14,500.00
6	SOUND WALL (BARRIER) (MASONRY BLOCK)		M2	202	$150.00	$30,300.00
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

SUBTOTAL	$75,420
MOBILIZATION (@ 10 %)	$8,380
SUBTOTAL BRIDGE ITEMS	$83,800
CONTINGENCIES (@ 25%)	$20,950
BRIDGE TOTAL COST	$104,750
COST PER SQ. METER	
BRIDGE REMOVAL (CONTINGENCIES INCL.)	
WORK BY RAILROAD OR UTILITY FORCES	
GRAND TOTAL	$104,750
FOR BUDGET PURPOSES - SAY	**$105,000**

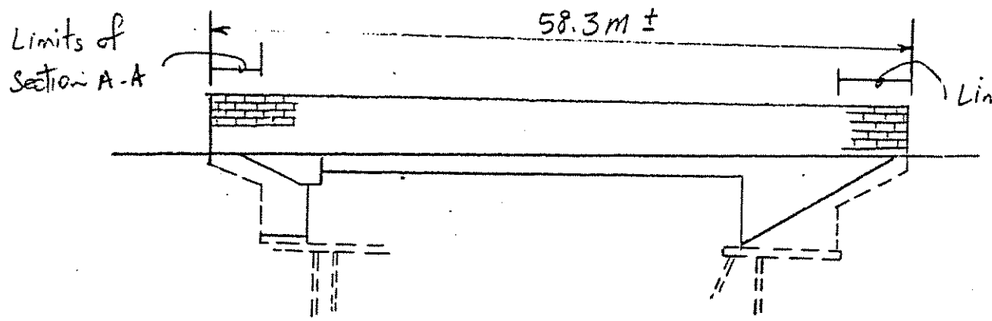
ROUTING
1. DES SECTION
2. DES A SUPV
3. DES B SUPV
4. DES C SUPV
4. PROJECT MANAGEMENT
6. COST ESTIMATES (LAST)

Caltrans Metric

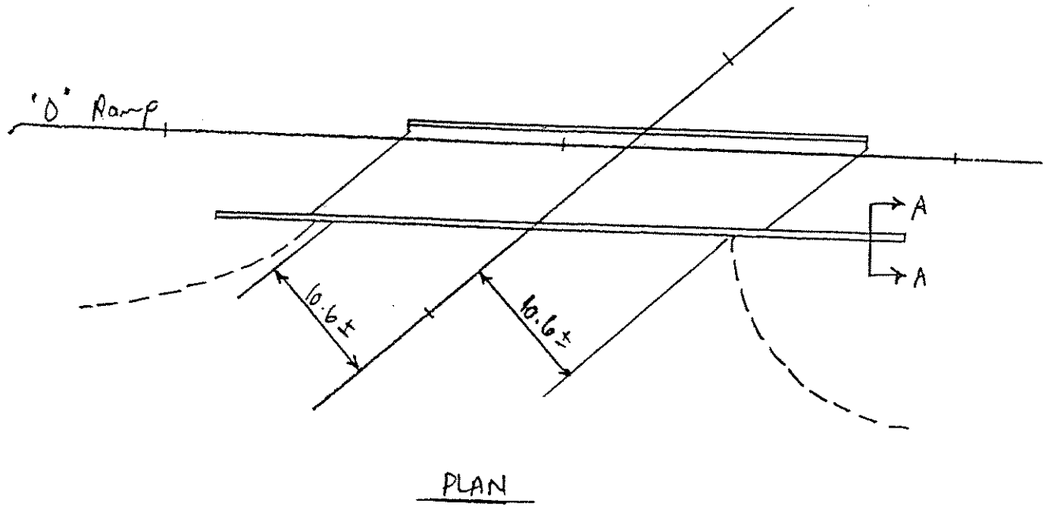
COMMENTS:

STATE OF CALIFORNIA–DEPARTMENT OF TRANSPORTATION–DIVISION OF STRUCTURES

DIST.	COUNTY	ROUTE	POST M



ELEVATION

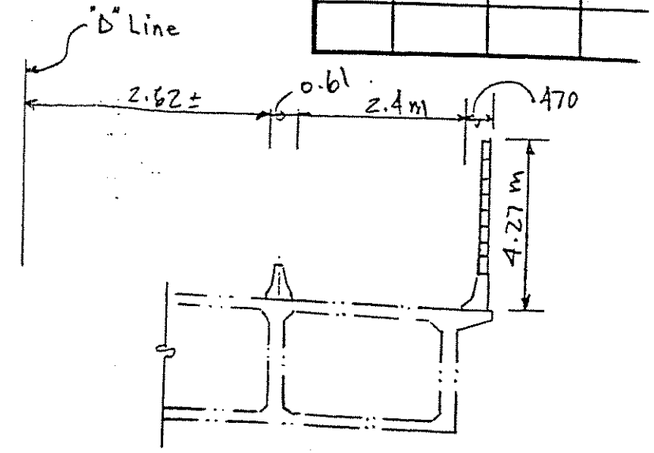


PLAN

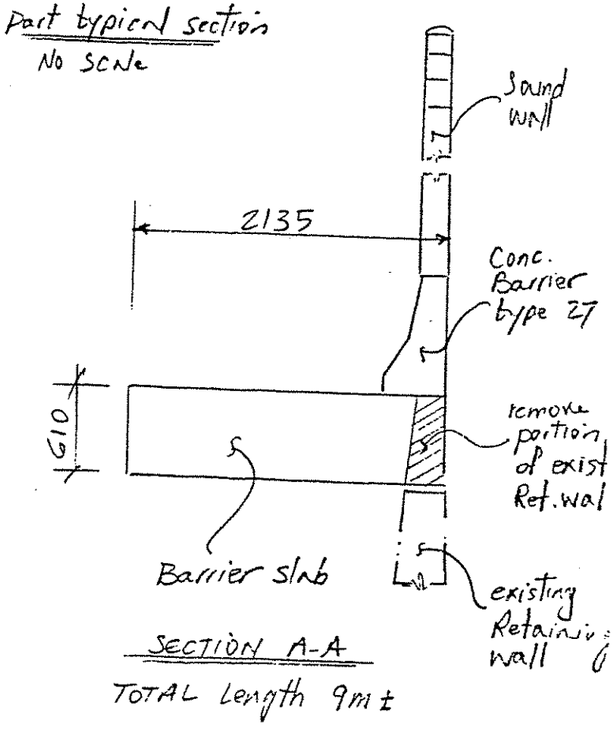
Note: Remove existing type 1 Barrier Rail

DATE OF ESTIMATE 9-13-00 GM

TOTAL COST (INCL 10% MOB. & 25% CONT.) $105,000



Part typical section
No Scale



SECTION A-A

TOTAL Length 9m ±

I-2

DESIGNED BY MAJID MADANI	DATE 9/12/00
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED	DATE

STRUCTURE DESIGN SECTION	PLANNING STUDY
14	14th Ave. UC. (ON RAMP)
	BRIDGE NO. 33-0389OL CU
	SCALE: EA 04-284201K

89 54334

DS D132 A (11/87)

Attachment J. Preliminary Environmental Review

State of California Business, Transportation and Housing Agency

Memorandum

To: MR. CHUAN CHEN
Office of Advance Planning

Date: March 1, 2001

File: EA 28420K
ALA-580-KP 67.1/67.9
(PM 41.7/42.2)

From: Department of Transportation, District 4
Office of Environmental Planning, South

Subject: Preliminary Environmental Review

PROJECT DESCRIPTION

Two soundwalls are proposed for Route I-580 eastbound near 14th Avenue to Ardley Avenue in the City of Oakland, Alameda County. A noise study indicated that current noise levels caused by freeway traffic exceed 67 dBA (HB311 criteria). The proposed soundwalls, 4.27 m high and 330 m combined length (14' x 1080'), will reduce noise levels by 5 dBA for 16 residential units. The noise barrier material is proposed to be masonry blocks (or concrete panels as alternative). The project will be constructed within existing State right-of-way. However, a temporary easement will be required for construction. This project will be funded by the 2000 STIP.

ENVIRONMENTAL EVALUATION

Based on our understanding of the project's scope and its location, we believe that it will not have a significant effect on the environment and that it will satisfy the requirements for a Categorical Exemption under CEQA and for a Categorical Exclusion under NEPA. However, this determination is contingent upon the existing project description. In addition, measures may be required to deal with the effects of the project on any sensitive environmental resources identified during the environmental study phase of the project.

If the scope of the project changes, and the changes have a potential for a significant effect to the environment, then an Initial Study/Environmental Assessment will need to be prepared.

The Office of Environmental Planning, South looks forward to providing further support on this project. For any questions or additional information, please contact me at CALNET 541-6214.

DENNIS RADEL
Branch Chief
Environmental Planning, South

Attachment K. PYPSCAN and XPM

```
SCAN 04 28420K          M ALA 580   R41.7        D P=F11 N=F12      *  A C S P  *
IN THE CITY OF OAKLAND ON ROUTE 580                 LENGTH     .5 EA  28420K
FROM 14TH AVENUE TO ARDLEY AVENUE          AGREE & CLEAR              FLAG S
  PROJECT DATA       PYPSCAN FACTORS    ENVIRONMENTAL CE      CONST COSTS (01/95)
PROGRAM  HB311      ALIGNMENT      _     RAILROADS                  (1000'S)
PROJECT TYPE NA     ADT          ___._   COASTAL ZONES        DISTRICT   DE      461
STRUCTURES    __    LANES          ___   FISH & GAME          STRUCTURES
HQ ADVERT    /      ON NHS?          Y   CORPS OF ENGR        TOTAL                461
ASAP DATE 02/04     WEATHER          3   HISTORICAL         R/W COSTS UNESCALATED
DIST PS&E 10/03     LOCATION         M   PUBLIC LANDS       ACQUISITION           25
STRC PS&E    /      VE REQ'D         _   ENDGR SPECIES      SQUAD _ PHONE 6221665
PARCELS        2    VE STUDY DATE  __/__/__
 SPLIT/COMBINE EA'S
  EA  REL     EA  REL
_______ _    _______ _                                      ENVIRONMENTAL UNIT ___
_______ _    _______ _                                      CALC WORKING DAYS    80
_______ _    _______ _          LANDSCAPE DAYS ____         CONST WORKING DAYS ____
                      PJD X     RWO X     CON X     STD _     STC _
RESPONSIBLE UNIT       218        ___       ___       ___       ___
% TRANSFERRED        ___ ___                ___       ___       ___
  TO DISTRICT         __  __      __        __        __        __
DESIGN ENGR TM-BC-CC        STR MANAGER _____________                FREEZE
PRJ MANAGER ANDERSON, R.    CNET# 541 - 6155  PYP UPDATE  06/04/01  UUU
                                                          06/04/01 15:12:33
```

```
PYRS 04 28420K          M ALA 580   R41.7        D    P=F11 N=F12  *  A C S P  *
S U P P O R T  BY  F I SC A L  Y E A R  WINDOW YR __ LAST PYPSCAN 06/04/01 (X)
   MONTHS  00-01  01-02  02-03  03-04  04-05  05-06  06-07  07-08  08-09  AFTER
PJD    47           .06    .22    .13
RWO                 .04    .22    .09    .04
STD
STC
CON    17                         .03   1.54    .19

TOTAL               .10    .44    .25   1.58    .19
M I L E S T O N E S  (* COMPUTED BY PYPSCAN) REG RW LEAD  14 WDYS   80 FLAG S
   ID NEED  APPR PSR BEG ENVR BEG PR   CIRC DPR CIRC ED  HEARING  PAR RPT
   06/01/00 06/  /01
 * 06/00 _  06/01 _  NA/   _  NA/   _  NA/   _  NA/   _  NA/   _  NA/   _
   PA&ED CL GEO BASE BR SITE  BEG BR   RW MAPS  REG RW   SKEL LAY ENV REVL
   03/  /02
 * 03/02 _  07/02 _  NA/   _  NA/   _  09/02 _  10/02 _  03/03 _  NA/   _
   BR PS&E  DT PS&E  RW CERT  RDY LIST HQ ADV   APR CNTR JOB COMP
            10/  /03 12/  /03 02/  /04          08/  /04 08/  /05
 * NA/   _  10/03 _  12/03 _  02/04 _  05/04 _  08/04 _  08/05 _

                                                          FREEZE   THAW
                                                           UUU
PROJECT DATA HAS BEEN UPDATED                          06/04/01 15:12:00
```

EA: 28420K
County: ALA
Rte: 580
Soundwall

DISTRICT XPM Work Sheet

Functions	Resource Groups	CC Group	CC	100	150	160	165	175	180	205	185	190	200	210	215	230	235	240	250	255	260	265	270	285	290	295	220	195	225	245	300	Tot Hours	PY's
ADMINISTRATION RELATED		**001-088**																														0	0.0000
1.Administration Executive Mgmt	04R-ADMIN_EXEC_MGMT	001-002																														0	
2.Resource Mgmt	04R-RESOURCE_MGMT	005-006																														0	
3.Audio Visual	04R-AUDIO_VISUAL	028																														0	
4.Public Information	04R-PUBLIC_INFO	038																														0	
5.Budget	04R-BUDGETS	042-044																														0	
6.Legal	04R-LEGAL	067-068																														0	
7.Information Services	04R-INFO_SVCS	073-080																														0	
8.Others	UNIX Support																															0	
ENGINEERING MANAGEMENT		**100-154**																														106	0.0602
1.Engineering Executive Mgmt	04R-ENGR_EXEC_MGMT	100-103																														0	
PROJ COORD. ENGR	59.EM01.110		110	106																												106	
2.Project Managers	04R-PROJ_MGRS	105-113																														0	
3.Project Schedulers	04R-PROJ_SCHED	140-143																														0	
																																0	
4.Program Management	04R-PROG_MGMT	146-149																														0	
																																0	
																																0	
5.Local Assistance	04R-LOCAL_ASST	152-154																														0	
6.Others																																0	
TRANSPORTATION PLANNING		**155-195**																														4	0.0023
1.Plng Exec Mgmt	04R-PLNG_EXEC_MGMT	155-160																														0	
2.Transp Plng	04R-TRANSP_PLNG	161-167																														0	
																																0	
3.Env Planning	04R-ENV_PLNG	168-180																														0	
																																0	
4.Technical Support	04R-TECH_SUPP	183-184	183				4																									4	
5.Transp Studies	04R-TRANSP_STUDIES	185,188																														0	
6.Forecast Model	04R-FORECAST_MODEL	195																														0	
7.Others																																0	
PROJECT DEVELOPMENT		**200-254**																														4520	2.5687
1.Project Development Exec Mgmt	04R-PJD_EXEC_MGMT	200-213	207	736																												736	
																																0	
2.Project Planner	04R-PROJECT_PLANNER	216-219																														0	
3.Design	04R-DESIGNER	220-279																														0	
BRDG AESTH/MODELS	59.PD07.228		228	1														24													25	
TRANS ARCH. SPECIALISTS	59.PD07.240		240															10													10	
BRDG DES OFFICE C	59.PD04.248		248											6	28			330	11				28		8						411	
	04R-DESIGNER		250			400	56	100	100	196	400	84	120			700	120				300	200	144	168	168	24	18					3208	
4.Others	DLP Design Review	53-120				20				20																						40	
ENGINEERING SERVICES		**280-349**																														4227	2.4003
1.Service Exec Mgmt	04R-SVCS_EXEC_MGMT	280-284	281	16																												16	
																																0	
2.PS&E/OE	59.OE01.285	285	285	2																	65	9										76	
OE-SPEC PROD./REVIEW	59.ES01.287	287	287	3														76	20			8		4								111	
OE-APPOINT/FINAL PROJ PREP	59.OD04.288	288	288																			15										15	
OE-COST ESTIMATES	59.ES01.290	290	290	2														38	5			8		4								57	
OE-PROJECT CONTROL/SUPPT	59.OE03.291	291	291																			11										11	
DRAFTING STRUCT. FOUND.	59.SF01.296	296	296												11																	-11	
3.Drafting Services	04R-DRAFTING_SVCS	301-302																														0	
DRAFTING-BRDG DES	59.PD14.301	301	301												11				159	6						3						179	
PROJECT PLANS	59.OE06.302	302	302	2																		56										58	
4.Mgmt Service Support	04R-MGMT_SVCS_SUPP	303-306																														0	
5.Surveys	04R-SURVEYS	308-310																														0	
																																0	
6.Photogrammetry	04R-PHOTOGRAMMETRY	311																														0	
7.Hydraulics	04R-HYDRAULICS	312-315	314	3		80				4						80					20			8								195	
8.Geotech and Matls Lab	04R-MATLS_LAB	316-331																														0	
GEOTECH. SUPPORT	59.SF02.316	316	316	6						151					26								11	1	1							196	
RIGID PAVE/STRUC CONC	59.ES08.317	317	317							5													40									45	
STRUCTURAL MATERIALS	59.ES08.318	318	318																				65									65	
TESTING/TECHNOLGY SVS	59.ES08.319	319	319															5					30									35	
TECHNICAL SERVICES	59.ES08.321	321	321		5	5																										10	
STRUCTURAL FOUNDATIONS	59.SF03.322	322	322	6	11									9	182			2														210	
ROADWAY GEOTECH-NORTH	59.SF03.323	323	323	34	56	16				528					224			16			56		156	20	32							1138	
9.Env Engineering	04R-ENV_ENGR	332-337																														0	
			332	64		2			2												2											70	
			334	0		0	88	48	16	0											184		40	8								384	
			335				40			160						100	0				40	0	24	0								364	
			336													60	100				20		20	10	10							220	
10.Lndscp Arch	04R-LNDSCP_ARCH	340-344																														0	
Cost Center in Landscape Architecture	Art Yee	342	342	8		5	5		5	30						350					80	10	10	100	80							683	
Cost Center in Landscape Architecture	Dave Yam	343	343			4	6		10	3					25						20		4	4	2							78	
11.Haz Waste	04R-HAZ_WASTE	349																														0	
12.Others																																0	
TRAFFIC MANAGEMENT		**350-399**																														45	0.0256
1.Traf Exec Mgmt	04R-TRAF_EXEC_MGMT	350-364																														0	
2.Traf Ops	04R-TRAF_OPS	366-379																														0	
	Manager		370													20					20			5								45	
3.Traf Engr	04R-TRAF_ENGR	380-385																														0	
4.Elec Sys	04R-ELEC_SYS	390-396, 830																														0	
5.Permits	04R-PERMITS	397-399																														0	

EA: 28420K
County: ALA
Rte: 580
Soundwall

DISTRICT XPM Work Sheet

6.Others																																				0	
RIGHT OF WAY		400-490																																		1368	0.7774
1.R/W Plng & Mgmt	04R-R/W_PLNG_&_MGMT	407	407	256	136	112	32	40	24	256	24		232			24	24			48			56	80					16	9						1368	
2.Others																																				0	
CONSTRUCTION		500-509																																		2418	1.3901
1.Construction Executive Mgmt	04R-CONST_EXEC_MGMT	500-509																																		0	
			501	20																																20	
			502	40																																40	
			505	80																																80	
																																				0	
																																				0	
2.Construction Office	04R-CONST_OFC	510-514																																		0	
			511													7				7			10	10	10	10										54	
			512																			30														30	
			514	30												10						20	30													90	
3.Field Construction	04R-FIELD_CONST	516-582																																		0	
			544	20		10										20				20		20	431	216	33	17								20	807	
			546																				120													120	
CONST OFFICE H	59.CN.2.547	547	547	26											20			10					756	26	18	10										856	
			552													10				10			30	10	10	10										80	
4.Construction Lab	04R-CONST_LAB	585-588																																		0	
			587																				71	40												111	
4.Contract Claims	04R-CONTRACT_CLAIMS	590	590																				25	25	55											105	
5.Labor Compliance	04R-LABOR_COMPLIANCE	595	595																				25													25	
6.Construction Safety	04R-CONST_SAFETY	599	599																				10			10										20	
MAINTENANCE RATED	04R-MAINT_RATED	600-609	602	40		8				40						24				8			16	24		24										184	0.1045
CONSULTANT CONTRACT	04R-CONSULTANT_CONTRACT																						40		80											120	0.0681
OTHERS			43. CC01													40																				40	0.0227
OTHERS																																				0	0.0000
Engineering Service Center (ESC)	All Resources Under ESC																																			0	

		Tasks		100	150	160	165	175	180	205	185	190	200	210	215	230	235	240	250	255	260	265	270	285	290	295	220	195	225	245	300	Tot Hrs	PY's
NOTE :		Total Hours		1501	208	662	231	188	157	675	1142	84	352	15	527	1405	284	670	42	835	275	379	2272	741	263	110	0	0	16	9	20	13063	7.4179
* Required Data for XPM input		Start Date*																															
^ Input as Days, Wks, and/or Years		End Date																															
		Duration*^																															
		Milestone Dates		End Proj			Circ DED		PA&ED			Bridg Data	R/W Cert					Struc PS&E	PS&E to HQ	PS&E to HQ	RTL	Appr CC	CCA	CCA	Final Rep	Final Rep	Reg R/W		R/W Cert		End Proj		

STIP Calculations Below:

Project initiation Document & Property Management- Not Incl in STIP	Task		100	150																																Tot Hrs	N/A
	Hours		0	208																																208	
Permits and Environmental	Task		100		160	165	175	180	205																												Tot Hrs	$114,780
	Hours		0		662	231	188	157	675																												1913	
Plans, Specification, and Estimate	Task		100							185	190	200	210	215	230	235	240	250	255	260	265																Tot Hrs	$419,940
	Hours		989							1142	84	352	15	527	1405	284	670	42	835	275	379																6999	
Construction	Task		100																			270	285	290	295												Tot Hrs	$218,520
	Hours		256																			2272	741	263	110												3642	
Right of Way	Task		100																							220		225	245	300	Tot Hrs	$18,060					
	Hours		256																							0		16	9	20	301					
																															Grand Total Hrs (STIP Components only)					
																															12855	$771,300				

Attachment M. NBSSR PERFORMANCE MEASURES

NBSSR PERFORMANCE MEASURES
FOR
EA: 04-28420K

SCOPE

Yes	No	
☒	☐	Is the "Need and Purpose" clearly defined and written in accordance with applicable permitting agency requirements?
☒	☐	Do the alternatives stay within scope or solve problem identified in "Need and Purpose"?
☒	☐	Does the scope incorporate required allied projects such as Traffic Management System (TMS) elements, replacement planting, environmental mitigation, maintenance needs, and relinquishments?
☒	☐	Have non-standard features, if any, been approved using established guidelines?
☒	☐	Is scope consistent and coordinated with local, regional and state system plans?

Scope Confidence Rating: 4.5
(1 low to 5 high)

COST

☒	☐	Is the estimate realistic and in accordance with established guidelines? Does it include a sum for contingencies consistent with risk?
☒	☐	Does the cost incorporate required allied projects such as TMS elements, replacement planting, environmental mitigation, and relinquishment requirements?
☒	☐	Is the Right of Way cost developed in accordance with established guidelines and consistent with anticipated needs?
☒	☐	Were benefit/cost ratios and/or the data to calculate them provided?
☒	☐	Were funding sources and commitments identified? Is proposed funding program consistent with project type?
☒	☐	Were support costs identified in a manner consistent with SB 45 and CTC Guidelines and supported by a complete project work plan?

Cost Confidence Rating: 4.5
(1 low to 5 high)

SCHEDULE

☒	☐	Is time allowed for environmental evaluation and construction commensurate with anticipated studies and work windows (e.g., hazardous waste, endangered or season-specified species)?
☒	☐	Does the schedule incorporate required allied projects such as TMS elements, replacement planting, environmental mitigation, and relinquishment requirements?
☒	☐	Is Right of Way time provided consistent with anticipated needs, including railroad and utilities?
☒	☐	Is schedule consistent with district resource capacity and based on an approved project work plan?
☒	☐	Do local stakeholders agree with the schedule?
☒	☐	Is schedule consistent and coordinated with local, regional and state plans?

Schedule Confidence Rating: 4.5
(1 low to 5 high)

QUALITY

☒	☐	Was the range of alternatives identified and evaluated consistent with the need and purpose of the project?
☒	☐	Were the preliminary design, Right of Way, traffic and environmental effort adequate to confidently establish scope, schedule and estimate?
☒	☐	Were the studies adequate to identify all project stakeholders such as permitting agencies and community groups, and their anticipated levels of involvement?
☒	☐	Were their adequate peer reviews such as district functional units, safety, maintenance and constructability reviews, value analysis, and OPPD so to alleviate any undue risk?

Quality Confidence Rating: 4.5
(1 low to 5 high)

OVERALL NBSSR Confidence Score **Total:** **18 x 5 = 90**

Note: Add above individual section confidence ratings and multiply by 5 to obtain overall confidence score. A score of less than 70 indicates "High Risk".